Lectures
ON
CHRONIC HYDROCEPHALUS.

Delivered at the Hospital for Sick Children, May, 1870.

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LECTURE III.
TREATMENT.

GENTLEMEN,—With the diverse circumstances under which cerebral dropsy arises, remedies which are beneficial in one case may be hurtful in another. The treatment of the disorder must be guided by its cause.

Those rare cases in which the effusion is encysted in the arachnoid cavity are seldom recognised during life, and may be dismissed as not included in our therapeutical experience. If such a case presented itself in an unmistakable shape, and the skull were still membranous, we might hope to do good by puncturing the cyst, and approximating its walls by external pressure.

As to ventricular dropsy, which is the only form we need consider, treatment may be productive of good or harm, as it is well or ill adapted to the nature of the case in hand. We must first consider whether we have to deal with increased cerebral pressure, or diminished cranial resistance.

If the disorder has commenced with active brain symptoms, convulsion, coma, or vomiting, these symptoms having preceded enlargement of the head, and more especially if they have come on subsequently to the general ossification of the skull, we may infer that there is an increase of fluid pressure in the ventricles, and may attribute the complaint to venous obstruction or inflammatory disturbance. Under such circumstances our hope of doing permanent good will be small, inasmuch as we know of no therapeutical measures which will reopen occluded channels, remove tubercle, or even put a stop to simple inflammatory exudation. Our endeavour in such cases must be to prolong life by keeping under the effusion of fluid—in most cases only a temporary relief. Purgatives, diuretics, and evacuants of the mercurial class, appear to offer the best chance; purgatives telling upon the effusion, and also upon the strength of the patient, more decidedly than diuretics. It has been sometimes found that hydrocephalus has promptly subsided upon the spontaneous occurrence of purging or diuresis; and it is equally a matter of observation that the same result has followed upon the use of medicines which exaggerate secretion. Of all drugs directed to this end mercurials give, as far as I have seen, the best results. The old view that mercury arrests inflammation and causes the absorption of effused lymph has indeed been abandoned. We know that inflammation (excepting, perhaps, syphilitic inflammation) runs its course regardless of calomel. A layer of "coagulable lymph" upon a cerebral or serous surface is incapable of removal, excepting by such mechanical means as cannot be employed during life; it passes through its natural transformations in contempt of the Pharmacopœia, and in its most favourable issue will form a layer of false membrane which will last as long as the individual of whose structure it forms a part. We must not, therefore, expect more than a limited advantage from mercury; but a limited advantage we may hope to secure. The solid products of inflammation are beyond our reach; but not so the liquid. Experience bears strong testimony as to the use of mercury wherever there is *fluid* pressure within the head; and as this occurs in a considerable proportion of the cases of cerebral disturbance which come under the care of the physician, there is reason in the rule I was once taught—"when in doubt, give mercury." A grain of grey powder or calomel two or three times a day, with or without mercurial inunction, will often diminish the pressure of intracranial fluid, and avert threatening symptoms. An efficacious mode of applying the remedy is in the combination of blue-pill, digitalis, and squills, as recommended in cases of dropsy by Dr. Matthew Baillie. A grain of blue-pill, with a third of a grain of squills, and a sixth of a grain of digitalis, will answer the purpose.

Such remedies are for palliation rather than cure; for the mitigation of symptoms rather than the arrest of disease. There may be cases in which such measures may, by gaining time, enable the patient to outlive such a temporary morbid condition as a limited coagulum in a venous channel, or an inflammatory attack independent of tubercle or permanent change. Such favourable circumstances are, however, unfortunately rare.

In those more numerous cases of chronic hydrocephalus in which there is no evidence of increased pressure within, in which the enlargement has not been heralded by convulsion, vomiting, or any other sign of cerebral disturbance, in which we may infer that the fault is in the cranium rather than in the brain, connected with imperfect ossification rather than with obstructive or inflammatory disease,—in these cases we can generally relieve and sometimes cure. The judicious use of external pressure is of the first importance; it seldom fails to stop further increase, and will often, in conjunction with other measures, occasion a decided diminution in the size of the head. I have found it the best way to surround the head with a fillet of elastic webbing, the size of which is adjusted to keep a pressure upon the head just short of causing red marks or impressing the skin with the texture of the material. It should be from two to three inches wide; the lesser width answers best unless the enlargement is very considerable. Care must be taken, by shifting the bandage, to prevent irritation of the frontal eminences, which are often inconveniently prominent in these cases. Cod-liver oil, iron, and other remedies adapted to the rickety constitution, may promote ossification, help time to solder together the disjointed bones, and put an end to the progress of the disease. These remedies may be conjoined with others, chiefly of the diuretic class—digitalis, liquor hydrargyri, or acetate of potass, which may help to lessen the accumulation. I have learned, however, in these cases, to attach a less importance to evacuant measures than to those directed to the rickety state.

The following instances show the kind of treatment recommended, and the amount of benefit which may be expected from it:—

Hydrocephalus associated with Rickets; gradual improvement under external pressure, cod-liver oil, iron, and diuretics.—Charles O——, one year and eleven months old, became my patient at the Children's Hospital with the symptoms of chronic hydrocephalus. At birth the head was thought to be rather large, but nothing was decidedly amiss until, at the age of three months, the head began to increase rapidly. A month later the child was described as having had an illness attended with somnolence and convulsive movements. The head continued to increase until the child was brought to the hospital. The head then was globular in shape; it measured twenty-three inches and a half in circumference. The fontanelle was widely open, the sutures gaping; the eyeballs depressed. The child was irritable in temper. The bowels were confined, the motions particoloured. There had been no vomiting. There was a marked rickety diathesis, as shown by the nodulated ribs and swollen wrists. The child was extremely helpless; it could not stand, nor even hold its head up, but lay like a doll in its mother's arms. An elastic bandage was now stretched horizontally round the head. Cod-liver oil with reduced iron was given to counteract the rickety state, while at the same time a diuretic mixture was employed, containing digitalis, nitre, and perchloride of iron. Under this treatment the urine increased in quantity and the aspect of the head improved, the fontanelle narrowing, the eyes becoming less depressed, while the enlargement ceased. Notwithstanding an attack of whooping-cough complicated with pneumonia, the child gradually improved, and when last seen, rather more than a year after the first observation, the eyes had nearly resumed their normal position, the fontanelle was nearly closed, and the child was plump and healthy in appearance, though still unable to walk. The head, now covered with hair, had a circumference of twenty-three inches and three quarters, probably not having increased in size since the commencement of the treatment.

The child was backward in intelligence, though it could say a few simple words.

Chronic Hydrocephalus; diminution of the size of the head under external pressure, cod-liver oil, iron, and diuretics.—Franklin M——, thirteen months old, came under my care at the Children's Hospital in May, 1865. His head had been enlarging out of proportion to his body since he was four months old, and had attained a circumference of 22 inches. The fontanelle was open, and the eyes were depressed. The child was very rickety, as appeared from the swollen condition of the ends of the ribs and of the radii. There were occasional attacks of convulsion. The head was encircled by an elastic bandage, while medicinal treatment was directed both towards the improvement of the rickety state and the removal of the accumulated fluid. Cod-liver oil was given, often with iodide of iron; while iodide of potassium and nitre were administered at the same time for the sake of their diuretic action. Under this treatment the circumference of the head was, in the space of four months, reduced from 22 inches to 20½ inches. It is not necessary to follow in detail the progress of the case. The bandage was constantly worn, and renewed when needful. The diuretics were varied by the addition of digitalis and acetate of potass, and care was taken to keep the bowels loose. Under this treatment the head ceased to enlarge, the skull became completely ossified, and the child got fatter and improved in intelligence. It was last seen in the summer of 1868, then being between four and five years old. The disproportionate size of the head was less conspicuous owing to the natural growth of the body. The head was then completely ossified, all traces of the fontanelles having disappeared. It was thickly covered with hair, and with this addition measured 21¼ to 21¾ inches round. The eyes were natural in position, the pupils being equidistant between the lids. There had been no convulsions for eighteen months. The child was sensible, but appeared to be somewhat deficient in memory. He could talk in simple words. He was fat, and had grown much, so that the size of the head was much less conspicuous. The bandage, which had been worn for three years, was now discontinued, and all medicines were stopped as no longer necessary. All tendency to morbid enlargement of the head had ceased, and the general health was good.

I shall relate one other case as an illustration of the advantage of pressure in the treatment of chronic hydrocephalus. It occurred in the practice of Mr. Richard Phillips, and was published by him in THE LANCET of Nov. 28th, 1857. I will give an abstract of his description.

A child was born after a difficult labour, in which the head was subjected to unusual pressure. A few days afterwards the head began to enlarge, and became hot and red, the superficial vessels swelled, the eyes were displaced downwards, and were affected with a tremulous movement; at the same time the stomach became irritable. Gradually the enlargement increased, the sutures generally separated, the scalp became stretched, apparently to its utmost limits, and it was thought that the head would burst, and thus terminate life in a scene too distressing to contemplate. The appearance of the child was described as most revolting, the scalp shining and livid, the eyes directed downwards and continually oscillating, the limbs attenuated. An elastic fillet of india-rubber webbing, two inches in width, was now placed round the head, upon which the separated bones drew together, the tension of the scalp and the size of the head diminished, and the threatening symptoms gradually lessened. The fillet was tightened as the head lessened in size until it was abandoned as no longer necessary when the bones of the head had become united. The case was watched by Mr. Phillips for a period of ten years, at the end of which time little evidence of the disease remained. The child was still headstrong and impetuous in temper, and had a slight cast in one eye, but displayed no other marked difference from a state of health.

I might relate many other cases in which the measures described have been successful in arresting the progress of the disease. Such a result may probably be expected more often than not. The younger the child and the more recent the enlargement, the more amenable is the case to treatment. When the head has attained a great disproportion to the body, it seldom happens that much can be done. As our power of reducing the size of the head is at best limited to a diminution of from one to two inches in circumference, it is clear that in many cases the patient can never hope to recover the natural proportions of humanity. Repeated small tappings offer a chance, which under such circumstances will probably be sometimes resorted to. But the statistics of the operation are eminently unfavourable. Dr. West has collected fifty-six cases of tapping for chronic hydrocephalus. Recovery was alleged to have taken place in fifteen cases, but in only four were the particulars recorded with sufficient accuracy and for a sufficient time after the operation to make the cure a matter of certainty. My own experience of the proceeding, which has been confined to two cases, has not been such as to make me wish it more extensive. The operation has more opportunity of doing harm than good; it may always kill, but can seldom cure. The reduction in the size of the head is limited by the rigidity of the distorted bones, so that, save under very peculiar circumstances, there could be no hope by tapping to bring the skull to its proper dimensions. Besides this, the proceeding involves a risk of fatal meningitis. When there is evidence, in coma or its like, of such pressure that life is in immediate danger, tapping may bring a reprieve. Under other circumstances, I should be disposed to trust entirely to such measures as have been described, on behalf of which it may be said that they are always safe and almost always advantageous.

PALPITATION: ITS DIAGNOSTIC VALUE.

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(*Concluded from page* 180.)

PALPITATION is intimately associated with a disturbed or altered innervation; whenever, in fact, there is a disturbance in the balance of the heart's nerve-forces it may occur. In many cases of nervous palpitation—it would, perhaps, be thought premature to say all—no increased action is felt in the arteries, great or small. Whatever nerve-derangement may induce the palpitation, there is no corresponding action in the arteries. The condition may be analogous to, and even homologous with, the disordered action of Graves' disease. In Graves' disease, and in some cases of chorea, the whole right ventricle seems violently thrown against the chest-walls with a large and forcible impulse; the impulse, too, being in the normal locality, not the large diffuse beat of dilatation a rib or so lower than natural. Certain it is that, not uncommonly, a violent action of the heart exists where the pulse is small, and even unusually constricted. This condition is common in women. It is evident, then, that, in this condition, where even the sphygmograph may not detect an unusual action in the arteries, the heart's action must be met or neutralised by some altered condition of the arteries. In some cases, too, there is no excitement in the large arteries, showing that the arterioles are not the only part affected. In hysteria we usually see this condition: the heart is acting with evident violence against no perceptible necessity. The patient is cold, the pulse small, the arteries evidently contracted, and the state of arterial tension is followed by a free flow of limpid urine, the result of an increased pressure on the glomeruli of the kidney. This condition has met with much elucidation from experiments performed by Ludwig, Thierry, the brothers Cyon, and von Bezold. (See "Carpenter's Human Physiology," 7th ed., p. 269.) In these experiments an excited action of the heart was evoked after every nerve-communication had been severed between the heart and the organism, the heart only being attached by its vessels. Irritation then applied to the medulla oblongata induced violent action of the heart, increasing its pulsations in rapidity. When only a small portion of the nerve-supply, the accelerator nerve, was left, there was increase of power as well as of rapidity—i. e., typical palpitation.

These experiments have thrown much light on the patho-

geny of nervous palpitation, and from them we can easily see how and when long-continued tissue-changes will result. Thus is produced the nervous hypertrophy of writers. When, then, we find the arteries unaffected by the heart's action, it is evident that that action is met or neutralised by a condition existing in the arteries. That this condition is connected with vaso-motor changes in the calibre of the arteries and arterioles we are fast learning to see. Thus, in nervous hypertrophy we see the effects of opposition offered to the flow of blood continued for some time. In nervous palpitation we see evidence of an extra demand on the heart, and of action to meet it. In nervous palpitation we are no longer driven to imagine a tumultuous action of the heart's fibres against each other—a condition which it is not easy to imagine, much less to offer any proof of. In the uterus sometimes is seen a want of synchronicity between the action of the different fibres, which was supposed to resemble palpitation; but even then it was merely a spasmodic action of a few fibres, not a tumultuous action of them all. If there is this antagonistic action in the fibres of the heart, it is certainly, so far as I know, unique, and foreign to the action of all other collections of fibres. In fact, there appears an inherent improbability in the possibility of its existence even; and such an explanation can only be admitted in default of any other one, and when every other known cause has been looked for and found wanting. Such an association is not associated with scrutiny, but with the want of it. I believe we will find that we can no more have a spontaneous, uncalled-for palpitation than we can have an uncalled-for, spontaneous hypertrophy, though not long ago that was supposed to be a common occurrence. As hypertrophy has been found to be a compensatory change, so will palpitation be found to be merely a symptom of over-taxation, and that only.

As palpitation occurs in structurally altered hearts on exertion, so it will be found, in nervous affections (so called) of the heart, to be the evidence of the heart's struggling against some opposition offered to the flow of blood. It is scarcely credible that palpitation can be connected with what is so obviously effort in the one case, and be simply an evidence of excess of power in another case. That palpitation may be occasioned by external agents, as nicotine or white hellebore, which French soldiers used to take to simulate heart disease, or any other agent which will disturb the nerve-balance, is as unquestionable as that it may also be relieved by other external agents. Thus, though palpitation may be allayed, and a partial palsy produced, by morphia or prussic acid, the remedies which are in most repute are diffusible stimulants, digitalis, and belladonna. Experiments on the frog have convinced me of what my clinical experience had long taught—namely, that digitalis and belladonna are really cardiac tonics—that is, they aid the ventricular contraction. They thus enable the heart to act more powerfully against the resistance offered, and in overcoming it the heart becomes quiet, regular, and normal; the quiet action or ability to act has taken the place of tumultuous effort; the ventricle can now contract without the visible effort—palpitation. That the effect of these agents is not to paralyse the heart's efforts is evident from the increased strength which is obtained by their exhibition. The relief is not due to their palsying effort, but to their aiding contraction.

Palpitation may be due to a call on the right ventricle, where the excessive action (if it were so) of the ventricle would not cause any effect in the radial pulse, or systemic arteries. But to meet the question of palpitation by attributing it to an activity of the right ventricle only, in cases where effect on the arteries may be wanting, is simply to shirk the broad issue. We know that the symptoms of over-action and demand on the right ventricle are widely different from those of simple palpitation; and that a totally opposite series of symptoms are then presented. We can scarcely, then, attribute palpitation to an over-action of the right ventricle only. That we may have a strong action of the right ventricle evoked when there is no stress upon the left ventricle is true; but in that case again it is effort to overcome obstruction. The fibres of the heart are, in many instances, common to both ventricles, and excited action in one cannot exist without an approximating condition of the other ventricle.

In considering the question of nervous palpitation without corresponding effect upon the arteries, we must remember that the cardiac ganglia act against the inhibitory action of the vagus, as well as against the blood-column. It is possible, then, that there may be a disturbance of the balance between them. But then there would be a long irregular systole, as is seen when the balance is disturbed by poisons. In this condition the muscular fibres can take no part, except in acting in accordance with the nerve-force brought to bear on them. But in this disturbance of the nerve-balance the action is irregular, slow, and intermitting, according as some ganglia are more or less acted upon, and bears no resemblance to palpitation. Neither does galvanising the vagus, as done by Weber, act in a manner at all analogous to palpitation. There is arrest of contraction, with one or two powerful beats on cessation of the stimulus; but this is not palpitation.

In palpitation from dreaded loss of blood, as in uterine hæmorrhage, we have what may truly be called over-action, by a reduction in the opposition offered to the ventricular contraction: the ventricular action is not excessive, but the blood no longer offers its wonted opposition. Now, muscular action must produce results either in overcoming opposition offered, or in unnatural contraction of itself—i.e., spasm. When, then, in this condition the muscular fibres are less distended by influx of blood, the energy is manifested in abnormal contraction, and ends finally in confirmed systole, as occurs in animals bled to death. The heart is here firmly contracted until it is impossible to contract further, but during this time the animal has died. Muscular action cannot go on without result; and if we have an action in the muscular fibres which is not met by some opposing force, unnatural contraction, or spasm, must ensue; and if palpitation were truly over-action of the heart, it would be one of the most dangerous and fatal of conditions. The further the inquiry is pushed, the less evidence can we find in favour of palpitation being over-action of the heart: it is a laborious effort, either from increased demand on the heart, or unfitness in itself. The heart, when its integrity is impaired or it is exhausted by effort, palpitates—i.e., a laborious evident effort takes the place of the steady normal contraction. If the obstruction offered is not at first sight apparent, it is nevertheless there. Muscular action cannot be barren in results: the ventricular action must either be apparent in the arteries, be neutralised by some condition existing in them, or end in self-contraction.

Palpitation, as a temporary evidence of over-taxation, may be engrafted on chronic conditions of acknowledged failure of power. Thus in valvular disease, or dilatation, we may have irregularity, or even intermittency, as persistent evidences of cardiac asthenia, and along with this an enfeebled general condition: that a balance has been struck by the lowering of the general condition to meet the heart's enfeebled state. On this we may have implanted palpitation on exertion, as evidencing a temporary overthrow of that balance: no pathological condition is more common in fact. If, then, palpitation were truly over-action of the heart, the sufferer ought to feel more equal to exertion during its occurrence; it ought to restore again to him that power the want of which has so crippled him. In asthenic conditions palpitation ought to be a tonic, and it ought also to occur most frequently among the robust and those accustomed to exertion;—i.e., palpitation ought to occur when the heart has not its accustomed exertion to undergo, during general quietude. Whether such is the case, or palpitation is found to occur on or after exertion in asthenic conditions, I will leave to others to decide, as it is a question of fact. My own experience has been unequivocal. As not being normal action, it must be connected with either excess or deficiency of power. As to whether it is associated I leave to our common experience. If it be allowable to anticipate and to pry into the future, it may safely be predicted that in time we shall come to learn that palpitation is as surely the evidence of over-taxation of the heart's powers, as we have learnt that cardiac hypertrophy is a compensatory growth, the result of a persistent call upon the heart for augmented effort. "It must be recollected that, in every organic disease of the heart, when palpitation becomes extremely violent and prolonged, both the impulse and the sounds may be diminished: in other words, the heart becomes gorged and incapable of adequately contracting on its contents, sometimes yielding a struggling convulsive impulse, with little sound and a feeble pulse, and, in an ulterior degree, especially during dissolution,

scarcely producing either impulse, sound, or pulse. Suffocative dyspnœa, lividity, and extreme distress, are always concomitant symptoms." So wrote Hope even twenty years ago.

Leeds, July, 1870.

FIBROUS TUMOUR OF THE UPPER ARM REMOVED BY OPERATION.

BY D. HAWLEY B. ANDERSON, M.D., C.M., &c.,
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ALIKEL SHAIK, a Moplah, aged thirty, obese but healthy, presented himself with a large swelling on the internal aspect of the upper arm towards its posterior margin, extending from the outer border of the axilla half-way to the elbow-joint. It appeared about the size of a small pine-apple, and, from its position, prevented approximation of the arm to the side, the poor fellow holding his elbow out, and his hand depending in an uncomfortable posture. He had come from his native village, a distance of twenty-four miles, and at his request I took him in hand.

The swelling, as above described in shape and external situation, had on its most prominent point an ulcerated patch with exuberant granulations, and from this there exuded drops of milky pus. The tumour, on examination, was felt to be globular and quite smooth, firm, heavy, and non-elastic, with the skin quite mobile over it, except where adhesive inflammation at the sore bound it down to its surface; it moved to a certain extent on the humerus, but not very freely; but whether this was due to the tenseness of the skin over it, or to its having a pedicle attached to the bone or surrounding tissues, was not evident.

The history he gave was: that it commenced spontaneously five years ago as a hard lump; it slowly increased in size until about six months ago, when it was punctured by a native doctor, and some application used, since which time the sore had existed.

The diagnosis was evident enough. The idea of its being a malignant tumour was excluded by the man's general good state of health and absence of glandular enlargements, its slowness of growth, mobility of skin over it, &c. &c.

The treatment by excision being therefore determined on, on the morning of the 8th of March the patient was put under the influence of chloroform. I made an incision vertically over the tumour, from the lower border of the axilla for five inches in length, of course cutting through and reflecting off the ulcerating portion of skin without excising it. This incision was subsequently enlarged to the extent of six inches. On cutting through the integuments I came upon a layer of gelatinous-like fibrous tissue, forming a cyst to the denser fibrous structure underneath. I dissected out the tumour, together with this cyst, on its external surface; but on its deeper aspect I found the latter intimately connected with the large nervous cords—one of which was bound down by fibrous bands to the surface of the tumour itself—and also to the muscles. I therefore began to evulse the tumour from its cyst. This was done nearly entirely, some small arteries entering its substance being ligatured; but it was found to be attached still deeper by a pedicle which extended to the periosteum in close relation with the brachial artery, &c. The vessels and nerves had to be carefully drawn on one side to cut this through. Portions of the cyst were then clipped away, but it was found to blend intimately with the muscular fibres of the triceps. But little blood was lost. Great care was taken in the dissection to keep on the surface of the tumour itself, otherwise important structures would have been injured. The line of incision luckily just avoided the course of the basilic vein, which was anterior to it at its lower part.

The flaps of skin were approximated by four metallic sutures, pads of lint soaked in carbolic acid and water applied, and bandage.

There was but little constitutional disorder after the operation, and the wound healed up steadily. He has now full use of the arm, though some thickening and induration of the tissues remain. Iodide of potassium, ten grains twice a day, has been administered.

The tumour weighed about a pound. On section, it presented the appearance of dense fibrous tissue; but a large loculus was discovered, which contained broken-down material and pus. On microscopically examining it, there was seen true fibrous tissue (nuclei being developed on treating with acetic acid), pus, blood-cells, and coats of blood-vessels.

There is no doubt that the puncture by the native doctor had given rise to softening of the centre of the tumour, which might have caused sloughing out in time.

Malleapoorum, Malabar, April, 1870.

ON MEDICINAL PEPSIN.

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SINCE the introduction of Corvisart and Boudault's "poudre nutrimentive" into medicine in the year 1854, pepsin obtained from the stomach of the pig,* calf, or sheep, in a state of greater or less impurity, has been extensively prescribed in dyspepsia and certain other affections. According to the testimony of some authorities of high standing, long experience in the use of this agent fully justifies Corvisart's predictions relative to its therapeutic value, which were originally based upon physiological reasoning. There are other authorities, however, equally eminent, who either express doubts as to the efficacy of pepsin, or positively state that it is totally devoid of medicinal power. This difference of opinion, in all probability, mainly arises from the circumstance that pharmaceutists supply medical men with various preparations, all bearing the same specific name of pepsin, but which differ very considerably in their digestive powers and other qualities. In fact, so far as I have at present been enabled to collect evidence relative to the merits and demerits of pepsin, I find those who speak favourably of its employment in the treatment of disease have prescribed that prepared by the best makers; while those who express a doubtful or adverse opinion respecting its value have been in the habit of prescribing those varieties or makes which the experiments of myself and others have proved to be practically without any digestive activity whatever. The relative digesting capabilities of several English and continental pepsins were investigated by Dr. Sieveking† in 1857, and a similar inquiry was conducted by Dr. Pavy‡ in 1863. The results of the experiments of both gentlemen indicated that there was not merely a difference in the qualities of the pepsin prepared by different makers, but that, as was particularly shown by Dr. Pavy, some of the samples examined were totally incapable of digesting muscular tissue. One would have thought that the publicity given to these facts in the medical journals would have caused the prescription of none but the best makes of pepsin, and that it would have induced those who had hitherto fabricated an inferior article to have either abandoned its manufacture or to have improved the methods they employed for its preparation. Such, however, is not the case, for pharmaceutists at the present date continue to vend, and medical men continue to prescribe, both the good and the bad qualities of pepsin. Only a few days ago an old-established and well-known wholesale druggist told me that a customer applied to him for two ounces of pepsin. He asked the customer whose make he required. The reply was, "the cheapest." On examining the kind of pepsin supplied on this occasion, it was found to be absolutely worthless as regards its power of digestion. Nevertheless it will be used medicinally, and if the patient derives no apparent benefit from its administration, the practitioner who prescribed it may be induced to condemn pepsin *in toto*; or, should the patient soon get better, the improvement will in all likelihood be attributed to a preparation which is perfectly inert. In the first case, injustice would be done to a medicine which, when properly

* First brought into notice by Dr. Beale.
† Medical Times and Gazette, 1857, vol. i., p. 336.
‡ THE LANCET, April 25th, 1863.

prepared, is said by many eminent practitioners to possess great therapeutic value; and, in the second, a worthless preparation would receive credit for performing a service it is totally incapable of rendering.

Being about to conduct some investigations on artificial digestion, and requiring for my purpose considerable quantities of medicinal pepsin, possessing the highest digestive energy, I purchased, in March last, samples of the principal English makers; also some of a French, as well as one of a German maker. These were examined in the manner hereafter described; and as the results arrived at corroborate substantially those obtained by Dr. Pavy seven years ago, although the methods of investigation adopted by that gentleman and myself differ,* I beg permission to lay the following account of them before the readers of THE LANCET, in the hope that it may induce those who are in doubt as to the value of pepsin as a therapeutic agent to reinvestigate the medicinal action of an agent which, according to theory, ought to render good service in cases in which the secretion of gastric juice is either deficient in quantity or defective in quality.

Ten samples of pepsin, obtained from different sources, were examined. The preparations of the several makers are distinguished from one another by letters in the following manner:—

A, A 1 } Same make, but purchased at different houses.
B, B 1 } Ditto, ditto.
C, C 1, C 2 } Ditto, ditto.
D
E
F.

EXPERIMENTS UPON ALBUMEN.

Fresh eggs were kept in boiling water for an hour, and then allowed to get quite cold. After depriving them of their shells, the whites were cut into the thinnest possible slices,† and great care was taken to reject any portions of yelk, as well as all slices of white of ununiform thickness. A weighed portion of coagulated albumen thus prepared was placed in a two-ounce wide-mouthed bottle, and covered with distilled water containing one per cent. by volume of concentrated hydrochloric acid.‡ These operations were conducted during the latter part of the day. Next morning the required amount of pepsin was weighed out, and added to the mixture of albumen and dilute hydrochloric acid. The bottle and its contents were then placed in a water bath, and kept at a temperature of 38 Cent. (100·4 F.). Digestion was regarded as complete when, at the end of four hours, particles of albumen could no longer be seen, and when the insoluble residue consisted of a very minute quantity of fibrous or membranous matters only. These observations were easily made, except in the experiments upon samples of pepsin containing large quantities of starch. In such cases, when digestion appeared to be finished, the result was not recorded until the contents of the bottle had been carefully elutriated, or strained through fine muslin, so that it might be ascertained with certainty, by the appearance of the residue in the bottle or on the filter (muslin), whether or not the whole of the albumen had been dissolved.

In the first series of experiments upon albumen, five grammes of coagulated egg-albumen, and twenty-five cubic centimetres of distilled water, containing one per cent. of hydrochloric acid, were employed. The quantities of pepsin used are stated in the subjoined table, which is intended to show the relative amounts of the different makers (A, B, C, D, E, F) required to digest the same quantity of albumen in four hours. Two comparative experiments were in every instance set going at the same time.

Table showing Results of First Series of Experiments on Albumen (25 cubic centimetres of acidulated water).

Weight of Pepsin employed in Grammes.	MAKE OF PEPSIN.					
	A.	B.	C.	D.	E.	F.
0·050	Digested.	Not digested.	Not digested.	Not digested.	Not digested.	Not digested.
0·075	...	Ditto.	Ditto.	Ditto.	Ditto.	Ditto.
0·100	...	Ditto.	Ditto.	Ditto.	Ditto.	Ditto.
0·150	...	Ditto.	Ditto.	Ditto.	Ditto.	Ditto.
0·175	...	Ditto.	Ditto.	Ditto.	Ditto.	Ditto.
0·200	...	Ditto.	Ditto.	Ditto.	Ditto.	Ditto.
0·250	...	Ditto.	Ditto.	Ditto.	Ditto.	Ditto.
0·300	...	Ditto.	Ditto.	Ditto.	Ditto.	Ditto.
0·400	...	Ditto.	Ditto.	Ditto.	Ditto.	Ditto.
0·500	...	Digested.	Ditto.	Ditto.	Ditto.	Ditto.
1·000	...	...	Ditto.	Ditto.	Ditto.	Ditto.
1·500	...	...	Ditto.*	Ditto.	Ditto.	Ditto.
2·000	...	...	...	Ditto.	Ditto.	Ditto.
3·000	...	...	...	Ditto.	Ditto.	Ditto.
4·000	...	...	...	Ditto.	Ditto.	Ditto.
5·000	...	...	...	Ditto.	Ditto.	Ditto.

It having been found impossible to continue the experiments with make C with more than 1·5 gramme of pepsin, in consequence of the inability of 25 cubic centimetres of acidulated water to keep the mixture in a sufficiently liquid state, a second series of experiments was performed, in which 50 instead of 25 cubic centimetres of diluted acid were employed. The weight of albumen used was the same as that in the first series—viz., 5 grammes.

Table showing Results of Second Series of Experiments upon Albumen (50 cubic centimetres of acidulated water).

Weight of Pepsin employed in Grammes.	MAKE OF PEPSIN.					
	A.	B.	C.	D.	E.	F.
0·050	Digested.	Not digested.	Not digested.	Not digested.	Not digested.	Not digested.
0·250	...	Ditto.	Ditto.	Ditto.	Ditto.	Ditto.
0·300	...	Ditto.	Ditto.	Ditto.	Ditto.	Ditto.
0·400	...	Ditto.	Ditto.	Ditto.	Ditto.	Ditto.
0·500	...	Digested.	Ditto.	Ditto.	Ditto.	Ditto.
1·000	...	...	Ditto.	Ditto.	Ditto.	Ditto.
1·250	...	...	Digested.	Ditto.	Ditto.	Ditto.
5·000	...	...	...	Ditto.	Ditto.	Ditto.

From the results of the experiments detailed in the foregoing tables, it will be seen—

1st. That, in order to effect the digestion of a given weight of albumen, very different quantities of the pepsin prepared by makers A, B, C are required.

2nd. That, taking the digestive power of C as unity, the digestive ratios of A, B, and C are as follows:—

C = 1 (1·25 gramme dissolves 5 grammes of albumen.)
B = 2·5 (0·50 „ „ „ „ .)
A = 25 (0·05 „ „ „ „ .)

In other words, A is ten times stronger than B, and twenty-five times stronger than C.

3rd. That, inasmuch as coagulated albumen mixed with acidulated water and equal weights of D, E, and F gave not the slightest indication of being digested, even at the expiration of twenty-four hours from the commencement of the experiment, it is evident that such so-called pepsins are, to say the least, practically destitute of the power of digestion. A 1, B 1, C 1, and C 2 were tested in precisely the same manner as the other samples; and it was found that their digestive powers did not materially differ from the corresponding samples A, B, and C, which, it will be remembered, were prepared by the same makers, but obtained from different sources.

The evidence afforded by the results of the experiments already referred to will, doubtless, be considered quite sufficient to prove the existence of a wide difference in the digestive energy of certain of the pepsins met with in pharmacy, and the utter worthlessness of others. Nevertheless, the following series of experiments upon fibrin was undertaken for the purpose of ascertaining whether or not the results would accord with those obtained in the previous investigations upon albumen.

* Dr. Pavy noticed the relative solvent action on frogs' legs of mixtures of pepsin and dilute acid.

† It is easier to observe the progress of the digestion of albumen if it be sliced than if it be minced.

‡ This degree of dilution was adopted from the circumstance that the results of special experiments indicated that it was more favourable to digestion than an acid of greater or less strength. It was also ascertained that water containing five per cent. of hydrochloric acid appeared to completely prevent the digestive process taking place. Is it, therefore, wise to administer acids along with or immediately after pepsin, in cases in which the stomach already contains an excessive quantity of acid?

* Experiments with this make of pepsin were here discontinued, in consequence of the 25 grammes of acidulated water employed being insufficient to maintain the requisite fluidity of the mixture.

EXPERIMENTS UPON FIBRIN.

In these experiments 5 grammes of finely-minced fibrin (lean of rump-steak) were mixed with 50 cubic centimetres of distilled water containing 1 per cent. by volume of concentrated hydrochloric acid, and the quantities of pepsin stated in the following table. Temp. 38° centigrade (100·4° Fahr.); duration of experiment, four hours. Two comparative experiments invariably set going at the same time. When, in consequence of the presence of starch, the progress of digestion could not be satisfactorily watched, the mixture was strained through fine muslin for the purpose previously named when describing the mode of experimenting with albumen.

Table showing results of experiments upon Fibrin.

Weight of Pepsin employed in Grammes.	MAKE OF PEPSIN.					
	A.	B.	C.	D.	E.	F.
0·45	Digested.	Not digested.	Not digested.	Not digested.	Not digested.	Not digested.
1·00	...	Ditto.	Ditto.	Ditto.	Ditto.	Ditto.
1·50	...	Ditto.	Ditto.	Ditto.	Ditto.	Ditto.
2·00	...	Ditto.	Ditto.	Ditto.	Ditto.	Ditto.
3·00	...	Ditto.	Ditto.	Ditto.	Ditto.	Ditto.
4·00	...	Digested.	Ditto.	Ditto.	Ditto.	Ditto.
5·00	...	...	Ditto.	Ditto.	Ditto.	Ditto.

We are now enabled to see—

1st. That the relative digestive powers of A and B on fibrin are very nearly the same as those upon albumen, the ratios being

10 A to 1 B on albumen;

8·88 (in round numbers 9) A to 1 B on fibrin.

2nd. That inasmuch as five grammes of fibrin were undigested by equal weights of pepsins C, D, E, and F, these preparations are practically destitute of medicinal value.*

Having shown, from the results of nearly three hundred experiments upon albumen and fibrin, that the pepsin distinguished by the letter A is far superior in quality to that of any other make, it appears to me simply an act of duty to the medical profession, and of justice to the undermentioned firm, to state that it is prepared by Messrs. Bullock and Reynolds, of Hanover-street, Hanover-square.† In conclusion, I beg to thank my very able assistant, Mr. E. Lapper, for the aid he has rendered me during the prosecution of this inquiry.

August, 1870.

ON A CASE OF

PLACENTA PRÆVIA, COMPLICATED WITH EXTENSIVE DISEASE OF THE HEART.

BY HENRY GRAMSHAW, M.R.C.S.

MRS. S. K——, aged twenty-nine; has had seven children. I first made acquaintance with this patient about a month back, when I visited her with the gentleman who had previously had the case under his charge, and found her to be suffering from disease of the mitral valves of long standing, and seven months advanced in pregnancy. She complained of much pain in the precordial region; but remarked that she had run the gauntlet of all ordinary remedies, and now only occasionally had recourse to a few ether drops when experiencing severe paroxysms of pain, in order to alleviate present suffering, looking upon her disease as hopelessly incurable.

On the morning of July 6th, at 10 A.M., a nurse who had charge of the case called at the surgery to ask me to visit Mrs. K——, as she was suffering from hæmorrhage of an alarming character, which commenced about 6 P.M. the day previously, and had been recurring at intervals during the night. I drove immediately to the house, arming myself simply with the usual midwifery case, a phial of perchloride of iron, and an injectional apparatus. I found the patient propped up in bed, lying on the right side, having reversed the ordinary position for delivery in order to give the heart free play. She presented an extremely blanched aspect, and her pulse was thready and intermittent. I was shown a trayful of napkins, thoroughly soaked in blood, and the hæmorrhage was still occurring in gushes. I moved the patient gently on to the left side; and, after clearing the vagina of clots, detected the nature of the presentation, which was entirely placental.

Considering this to be a case in which prompt action was essential, I determined at once to turn and deliver. I therefore carried my hand steadily on, detached the placenta, and after some little trouble gained the foot, and brought the child into the world alive, subsequently clearing away the placenta, sweeping out a few clots, ensuring contraction of the uterus, and firmly bandaging the abdomen. The patient bore the operation well—indeed far better than I could possibly have expected considering her exhausted condition; and after a judicious yet liberal administration of stimulants and opium I had the satisfaction of leaving her in better plight than I had dared to anticipate I should do when I first entered the room.

Remarks.—Placental presentations are not so rare in midwifery practice, or at all events have not been so in mine, that I should have ventured to intrude this one on the notice of the profession had it not possessed the peculiarity of being complicated with extensive disease of the heart, and also produced in my mind some, I hope pardonable, professional gratification at finding that prompt action saved two lives, for had I delayed or temporised in order to obtain a second opinion (which I confess I coveted) valuable time would have been lost, and probably mother and child also; and I preferred (as many country practitioners do daily) to accept an undivided and grave responsibility rather than risk a patient's life, and in the issue was amply rewarded.

Ampthill, Bedfordshire, July, 1870.

A Mirror

OF THE PRACTICE OF

MEDICINE AND SURGERY

IN THE

HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

KING'S COLLEGE HOSPITAL.

RESTORATION OF THE DIMENSIONS OF A MOUTH AFTER A GUNSHOT WOUND.

(Under the care of Sir WILLIAM FERGUSSON.)

A REPORT of this patient's injury, and an engraving of the consequent deformity, have already appeared in THE LANCET. Ever since the accident, in which the lower jaw from the mesial line to the neck of the condyle on the right side was shot away by the discharge of a musket, the patient has suffered a constant and distressing dribbling of saliva from an extension of the oval opening as far back as the angle of the jaw, of which the edges were closely adherent to the subjacent tissues.

On the 6th of August, Sir Wm. Fergusson raised the adherent tissues of the cheek with the scalpel, and, as he had anticipated, found no difficulty in bringing together their edges, which he united by means of three harelip-pins with the usual suture, and freely painted with collodion, thus reducing the mouth to a natural size. There was no scarcity of tissue, but rather a redundancy; which, however, Sir William did not remove, but spared in anticipation of a further ornamental operation.

EXCISION OF THE HIP-JOINT; CLINICAL REMARKS.

(Under the care of Mr. WOOD.)

The patient was an emaciated child, six years of age, with long-standing hip disease and pelvic abscess. In the groin was a fistulous opening, which admitted a probe down to

* The fibrin remained undigested even at the end of twenty-four hours from the commencement of these experiments.

† Dr. Pavy also showed in 1863 that the pepsin of Messrs. Bullock and Reynolds was much more active than that of any other maker.

the internal surface of the ilium. Corresponding to the acetabulum, in the anterior aspect of the upper third of the thigh, were three or four fistulous openings of superficial burrowing abscesses; while posteriorly the skin had sloughed away, so as to leave a ragged quadrilateral opening, through which projected the trochanter, covered by its muscles. The limb itself was straight, not inverted, and only slightly shortened; and Mr. Wood said that he had hoped at first that good diet and nursing would save the child from an operation, but that interference had now become necessary to save life. He added that disease of the hip is one which, in most instances, has a tendency to cure itself, and that when an operation is resorted to, it is generally to remedy distortion, and to hasten the natural process of healing; but in this case there was little distortion to rectify, and the operation was required to give the child a chance of life by removing diseased structures, and affording a free exit for discharges. Having removed a considerable quantity of diseased bone, Mr. Wood said that he had found a perforation of the acetabulum communicating with the pelvic abscess, and caries of the head, neck, and part of the shaft of the bone. In the latter situation he had removed the diseased tissue by gouging down the shaft to the extent of about an inch, leaving a thin shell covered by the periosteum. It was his habit also to remove the trochanter in these cases, even if proved to be healthy; for both Sir Wm. Fergusson and himself had found that the resulting limb was none the better for a literal adherence to the principles of conservative surgery in this respect; while, on the other hand, if the trochanter were left, the operator had to work round and beneath it, making a much larger wound, at the mouth of which he left an effective obstruction to the free discharge of matter and spicula of bone. But he was most careful at this point, and at every other which he touched in the operation, to save the perichondrium and periosteum; especially he preserved the perichondrium of the trochanter and the attachments of its muscles, leaving a well-defined cartilaginous arch, from beneath which he removed the diseased bone. Mr. Wood explained that this operation was known and practised elsewhere; but that the part which he claimed was the removal piecemeal, instead of *en masse*, of the diseased bone, and that by this proceeding he saved the largest possible surface of bone-producing tissue; also that the external wound, the internal damage to soft parts, and hæmorrhage were reduced, and that the recovery was more rapid. The general result of the operation, as a whole, was said to be the formation of a smooth, rounded head on the upper extremity of the femur, which does not become anchylosed with, but moves freely in, the acetabulum. Mr. Wood also drew attention to his having commenced the operation by making a T-shaped incision, the tail portion of which he always endeavours to bring over the spot where he would be likely to use the saw, which he could then freely handle without further injury to the skin; while after the operation there remained a depending furrow, which facilitated the evacuation of discharges.

MIDDLESEX HOSPITAL.

EXCISION OF A FIBROUS TUMOUR ATTACHED TO THE FASCIA TRANSVERSALIS.—TAPPING FOR ASCITES.

(Under the care of Mr. HULKE.)

AUG. 5TH.—The patient, a woman rather below middle age, presented an oval tumour situated above the outer two-thirds of the crural arch of the right side. Mr. Hulke said a difference of opinion existed among his colleagues as to whether the tumour was within or external to the peritoneum. Its upper two-thirds were freely movable; the lower third was attached. That it was not in relation with the uterus had been ascertained by deflecting that organ by means of a sound. He proposed to make a free incision through the superficial structures, to dissect cautiously down towards the tumour, and to remove it, unless he found it impossible to do so without injury to the peritoneum. Accordingly, having divided the superficial tissues, Mr. Hulke dissected through the external and internal oblique and the superficial portion of the transversalis, and found the tumour to be attached to the fascia transversalis. By very cautious dissection, mainly with the handle of the scalpel and the finger, it was removed without injury to any deeper structures. The wound, having been closed with a couple of sutures dipped in carbolic lotion, was dressed, according to Professor Lister's method, with carbolic oil-skin, lac, and strapping. The patient was ordered a grain of opium immediately on recovering consciousness, and one every subsequent three hours. The tumour was a simple fibrous growth, about half as large again as a hen's egg. Mr. Hulke has given the system of carbolic-acid dressing a long and varied trial, and speaks very highly of it as a mode of dressing the wound produced by paracentesis abdominis.

We afterwards saw Mr. Hulke tap a patient for ascites. The way in which it is his habit to dress the wound in the skin which has been produced by a preliminary touch with a knife, is as follows:—The lips of the small wound are transfixed by a needle, beneath which a suture is wound in a simple circular direction, a small square of lint is placed underneath on either side, and the ends of the needle are clipped off in the usual way; over the whole is then laid a thin layer of cotton wool dipped in collodion, and a little of this latter is added to ensure the cotton wool and lint being cemented together into a contracting shield, which is both air-tight and water-tight.

BELGRAVE CHILDREN'S HOSPITAL.

CASE OF HYDATIDS OF THE LIVER.

(Under the care of Dr. ANSTIE.)

AGNES B——, aged six years, was admitted into this hospital on May 3rd. About two months ago, while on the voyage home from Australia, where she was born, the mother noticed a swelling just beneath the ribs, on the right side, which gradually increased in size, and at the time of the child's admission formed a fluctuating tumour extending from the lower border of the last floating rib to the umbilicus in one direction, and to a point midway between the last rib and the crest of the ilium in the other. The child, when measured just below the ribs, was found to be about twenty-seven inches round. She did not complain of any pain, except when pressure was made on the tumour. When six months old she had dysentery, but has never had any other illness. She was ordered bark and iodide of potassium, and was kept in bed. This treatment was continued till the 18th, when the tumour was found to have increased in size, and to have become more painful. A grooved needle was passed in by Mr. T. Pick, and some clear fluid escaped. A very fine trocar was immediately afterwards introduced, and about seven ounces of fluid drawn off. It was alkaline and non-albuminous; no hooklets were discovered in it under the microscope, only a number of crystals of various forms, all more or less coloured green. The cyst was not emptied.

The child passed a restless night after the tapping, and the next day the temperature had risen, and there was a little fever. This, however, passed off in a day or two. After the fluid was removed, the child only measured twenty-four inches. She continued this size till June the 8th, when she measured twenty-five inches. On the 18th she got up, and gradually diminished in size from that time. After being up a week she only measured twenty-two inches. She had no pain; her bowels were regular (when first admitted they were rather constipated). Percussion was quite resonant over the region formerly occupied by the tumour.

Nothing occurred to raise a doubt that the cure was complete until about the 5th of July, when it was noticed that the abdomen was slowly increasing in size. On the 8th it was found to measure twenty-three inches, or one inch more than it had previously sunk to.

On July 12th Dr. Anstie made a careful examination. There could be no doubt that the region of dulness on percussion had extended downwards somewhat, and the superficial appearance was as if the liver had re-enlarged. Careful palpation and percussion, however, induced considerable doubt of this. It was found on inquiry that the child had suffered much from flatulence, and that the motions were light-coloured. The appetite was good enough; but it was distinctly made out that potatoes regularly produced indigestion and "rumbling with wind." Accordingly cabbage was ordered to be given with dinner instead of potatoes, and

the child was ordered to take small doses of dilute nitric and muriatic acids, with gentian. The result was that the digestive discomfort immediately disappeared; and on re-examining the abdomen on July 19th, a week later, the size round was again only twenty-two inches, and there was clear percussion over the whole region formerly occupied by the tumour. The child was now looking exceedingly well and healthy, and a few days later was discharged perfectly cured.

The above notes were kindly supplied by Mr. W. Macdonald, the house-surgeon, and Dr. Anstie has added the following comments:—

This case has nothing remarkable in its features now that the story is all told; it is only a confirmation of the fact—still far too little popularised—that early puncture of a hydatid tumour with a fine trocar, and withdrawal of a portion of the fluid, is in itself quite innocuous, and is practically the only treatment worthy of a moment's consideration. There was, however, some little difference of opinion as to the diagnosis in the first instance. It had been discovered that the child had suffered from dysentery when in Australia, and it was suggested that the tumour might be a chronic abscess, secondarily produced. In favour of this view it was urged that the tumour did not present the well-defined and globular shape which is usually characteristic of hydatids. Dr. Anstie declined to accept the theory of abscess, chiefly because of the very considerable time (twelve months) which had elapsed between the attack of dysentery and the first notice of the swelling; of the total absence of any history of severe pain or shivering at any part of the intervening period; and of the appearance of excellent health and spirits which the child presented. Still, without the aid of the exploration-needle, or the fine trocar, there might have been a certain amount of hesitation in tapping. With the fine trocar in our hands it is not too much to say that we may venture to tap any tumour that can possibly exist, with at least the certainty that we shall do no harm; and, in case it turns out to be hydatids which have not existed too long, with the certainty of speedy cure.

Reviews and Notices of Books.

First Report of the Gas Referees to the Board of Trade. The Sulphur Question. Official Return. July, 1870.

(CONCLUDING NOTICE.)

THE establishment of a Board of Referees was an indispensable concomitant of the Gas Act of 1868, as a means of carrying out impartially the most important provisions of that Act, and also as a tribunal for investigating and solving questions connected with gas manufacture, which Parliament, after hearing both sides of the case, felt itself incompetent to decide. But for the establishment of such a Board, holding a neutral and impartial position, the Acts of 1868–69 would have proved as unworkable as the Act of 1860. The gas companies would have been in a state of chronic mutiny, or the public agitation would have continued as violent as before. The fact that there is no threat of renewed fight on the part of the companies, and no complaint on the part of the public—a state of matters hitherto unheard of,—is a remarkable proof of the confidence which both of the old belligerent parties place in the impartiality and care with which the duties of this Board are discharged.

Apart from their ordinary and permanent duties of the kind above-mentioned, the Referees have issued two reports, which the Board of Trade have considered of such importance as to be laid before both Houses of Parliament, and thereby made accessible to the public. As the latter of these reports is exciting much attention, we shall devote a few words to one or two of its leading features, especially as it relates to the purification of gas—a matter deeply affecting the sanitary interests of the public.

Every man of science—indeed, any person experienced in the correct processes of investigation—must have been struck with the inadequacy, to use the mildest term, of the evidence adduced before successive Parliamentary Committees on the question of the sulphur-impurity in gas. Indeed, so obviously worthless was this evidence that the Committee of 1868—the last of the series—refused to act upon it, and annulled the decision previously come to in a most hasty and ignorant manner in 1860. As appears from the present report, the Board of Referees have set to work in a very different style. Whatever may have been their opinions at the outset on the results obtained in the laboratory, they rightly considered that the first point to be determined was, what are the actual results of the purifying processes employed in the gasworks? With this view, they instituted a uniform and systematic series of experiments, which have been executed under their supervision by the gas engineers of the Companies included under the Acts of 1868–69. The results are of a very startling and extraordinary character.

As the most recent idea, and one held by the highest so-called "authorities" upon the subject, was to trust to the scrubbing processes of purification as the most efficacious for the removal of the sulphur-impurity, the Referees gave their first attention to this point. The results of the experiments, however, showed the utter fallacy of this newest and most hopeful theory. In only one case did the "scrubbers" appreciably diminish the quantity of sulphur in the gas (i.e., the sulphur compounds other than sulphuretted hydrogen), and in the majority of cases it was found that there was actually more sulphur in the gas when it left the scrubbers than when it entered them!

Next, applying their tests to the purifiers, which are expressly employed for the purpose of removing the sulphur-impurity, the Referees again found that the facts were entirely contradictory to the universally received opinion. Their investigations on this point are still incomplete, but they state that in "one of the largest gasworks in London" the result of a month's continuous experiments showed that the gas contained upwards of 30 per cent. more "sulphur" when it left the purifiers than when it entered them! Here is food for reflection with a vengeance. In fine, we make the subjoined excerpt.

"The following is another return, but from a different gaswork, in which all the processes of purification are included:—

——	1st Experiment.	2nd Experiment.	3rd Experiment.	4th Experiment.*	Average.
	Sulphur.	Sulphur.	Sulphur.	Sulphur.	
Inlet of scrubber ...	23·6 gr.	23·9 gr.	25·6 gr.	25·7 gr.	24·7 gr.
Outlet of scrubber...	24·9	22·6	25·5	26·2	24·8
Outlet from wet lime purifier	25·0	24·0	25·1	26·3	25·1
Outlet from oxide purifier	24·1	25·2	24·6	22.	24·0

* In the 4th set of experiments the gas was passed through dry lime after the oxide.

"In this case the effects of the purifying processes are actually *nil*, the gas having passed through all stages of purification, without any diminution of its sulphur-impurity."

The Referees suggest what appears to be a correct chemical explanation of the unexpected fact of more sulphur being found in the gas at the outlet of the scrubbers than at the inlet; but they offer no suggestion in regard to the still more extraordinary fact of the same kind obtained from the "purifiers." They state that their investigations are still being carried on, and, unquestionably, the great desideratum is an accurate knowledge of the *facts*. Facts are the first things to be looked to; it will be time enough to theorise when the data of theory are before us. But the thought that must suggest itself to everyone is,—How is it that such a state of matters exists? Still more,—How

comes it that such facts have never before been brought to light? The tendency of the human mind to move in fixed grooves is well known in all departments of life; and the gas-engineers are so fully occupied in the ordinary work of gas-making, and of superintending the affairs of the large establishments under their management, that they have little or no time for anything else. But we believe every gas company has a "consulting chemist"; and certainly it might have been expected that these scientific advisers would not have overlooked so important a part of their duties. The facts now brought to light were ascertainable by anyone who took the trouble to investigate the results of the purifying processes employed in the gasworks; and, after all the fights and costly litigation before Parliamentary committees, with an abundance of confidently expressed dogmas, it is strange we should only now be beginning to know the initial and fundamental facts of the case.

The Report upon which we are commenting, although most tersely and clearly written, is a lengthy document; and we can only touch the gist of it with our needle. But we cannot conclude without referring to the new sulphur test devised by the Referees—a test which is greatly superior to any other hitherto invented. It has long been known that the Letheby sulphur test was imperfect, and required great precautions in using it; but no one until now has hitherto succeeded in devising a better one. We must refer our readers to the Report itself for a description of the Referees' new apparatus, and of the results obtained from it; and also for Dr. Odling's report upon it, the substance of which is expressed in the following sentence:—"Altogether, I find your process extremely easy of performance, while it is certainly more trustworthy and accurate than any other process hitherto contrived for the use of practical men. In particular, I consider the substitution of solid sesquicarbonate of ammonia for the solution of ammonia hitherto used as a very valuable improvement in the process."

Experiments on the Effects of Alcohol (Ethyl Alcohol) on the Human Body. By E. A. PARKES, M.D., F.R.S., Professor of Hygiene in the Army Medical School, and Count CYPRIAN WOLLOWICZ, M.D., Assistant-Surgeon, Army Medical Staff. (Reprinted from the Proceedings of the Royal Society, 1870.)

VERY great care and trouble appear to have been taken by the experimenters to obtain accurate results, and the instruments used were extremely sensitive. We may, therefore, accept their conclusions as thoroughly reliable, however much they may be at variance with those obtained by other scientific observers. The authors' experiments and observations do not include wine or beer, which contain substances besides alcohol, and which may make their action somewhat different. Whatever large and narcotic doses of alcohol may effect in lowering the temperature of the body in men and animals, it is clear that it did not, in the limits stated by our authors, have any such effect. It would be impossible to state all the conclusions arrived at by Dr. Parkes and Count Wollowicz. The pamphlet must be consulted to obtain these; but we may advert to some of the more interesting. In the individual experimented on it would appear—(1) that some point near two fluid ounces of absolute alcohol was the limit of the useful action on appetite. Four ounces lessened it considerably; and larger quantities almost destroyed it. (2) Alcohol appears to stimulate the heart's action to increase, the contractions of the ventricle being short. (3) It did not seem to impede primary digestion. (4) Neither pure alcohol nor brandy, in the quantities given, lessened the temperature, nor did they in any way influence the temperature during an attack of ephemeral fever. (5) No effect on the nervous system was evidenced by any increase or decline in the amount of phosphoric acid.

The general result of the experiments is to confirm the opinions held by physicians as to what must be the indications of alcohol both in health and disease.

"The effects on appetite and on circulation are the practical points to seize; and if we are correct in our inferences, the commencement of narcotism marks the point when both appetite and circulation will begin to be damaged. As to the metamorphosis of nitrogenous tissues or to animal heat, it seems improbable that alcohol in quantities that can be properly used in diet has any effect; it appears to us unlikely (in the face of the chemical results) that it can enable the body to perform more work on less food, though by quickening a failing heart it may enable work to be done which otherwise could not be so. It may then act like the spur in the side of a horse, eliciting force, though not supplying it.

"The employment of alcohol in health and disease is so great a subject that we should have felt tempted to extend these remarks to some points of medical practice, had it been desirable to do so in this place. We will only say that while we recognise in these experiments the great practical use of alcohol in rousing a failing appetite, exciting a feeble heart, and accelerating a languid capillary circulation, we have been strongly impressed with the necessity of great moderation and caution. In spite of our previous experience in the use of alcohol and brandy, we were hardly prepared for the ease with which appetite may be destroyed, the heart unduly excited, and the capillary circulation improperly increased. Considering its daily and almost universal use, there is no agent which seems to us to require more caution and more skill to obtain the good, and to avoid the evil, which its use entails."

New Inventions

IN AID OF THE

PRACTICE OF MEDICINE AND SURGERY.

WOODWARD'S OBSTETRIC SUPPORT.

WE received some time ago a specimen of the "Obstetric Support" contrived by Dr. Woodward, of Worcester, and were so much impressed by its simplicity and by the advantages likely to attend upon its use that we placed it in the hands of a correspondent for trial and examination. The verdict of clinical experience is so emphatically in its favour that we are bound to call the attention of our readers to the nature and merits of the contrivance.

The "Support" consists of an obscurely triangular metal plate, somewhat curved on the flat, covered with leather, and padded so as to rest comfortably on the sacrum. At the back of the plate is an upright bar, on which slides a transverse spring, capable of being fixed at any point by a screw, and carrying a button at each extremity. There is a belt of webbing fitted to the abdominal convexity, and terminating at each end in a strap furnished with buttonholes. The patient lying on her left side, one strap of the belt is passed under her from before backwards, the padded plate is applied to the sacrum, and the straps are buttoned to the ends of the transverse spring. The tension of this spring regulates the degree of support, and its position on the bar regulates the direction of support. There is also an auxiliary spring proceeding from the sacral plate and passing over the hip, to terminate in a sort of truss pad in front. It will be manifest from this description that the instrument can be applied with great facility; that it can be tightened or loosened at any moment, and over a considerable range; and that the axis of the force employed may be more or less inclined, by the whole length of the sacral bar.

Practitioners of midwifery who have laid to heart the maxim of David Davis—never to let a patient pass through

her labour without a binder—are well aware of the saving of pain, time, danger, and anxiety that the practice affords. They are well aware, also, of the difficulty of entrusting the binder during labour to any but a highly skilled nurse, and of the undesirable fatigue to her that its use sometimes involves. By Dr. Woodward's instrument these difficulties are completely overcome. The apparatus may be so adjusted at first as to afford comfortable support in the required direction; it may be tightened at the commencement of a pain by a simple change of the button-holes of the straps; the line of pressure may be made to follow the downward course of the fœtus; and on delivery the band may be instantly so tightened as to retain its grasp upon the empty womb. It is extremely comfortable and grateful to the patient, giving agreeable support to the abdomen and gentle pressure to the back; and its use will be found to reduce to a minimum the distressing aching and soreness of the abdominal muscles that so often follow labour, and that is so sure to follow when a binder has been either neglected or imperfectly applied. For all ordinary cases, the advantages of Dr. Woodward's instrument are chiefly in its mechanical perfection, and in the ease with which it can be applied; but in cases of lax or pendulous abdomen, when the uterine axis deviates considerably from that of the pelvic inlet, it will be found to have a value that is all its own, and its use will often save a long period of suffering to the patient and of waiting to the doctor. We have great pleasure in very strongly recommending it to our readers; and we are quite sure that those who use it will find their patients bear warm and grateful testimony to the comfort that it affords. It is manufactured by Mr. Plum, of High-street, Worcester; and it is right to add that Dr. Woodward, who has taken much trouble in bringing it to perfection, derives no pecuniary or other benefit from its sale. It is fitted into a small locked black bag, at the moderate price of £1 11s. 6d.; and we believe that the maker is about to arrange for it to be supplied through London houses.

THE

ADDRESS IN MEDICINE

DELIVERED BEFORE THE

ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION AT NEWCASTLE-UPON-TYNE,

BY FRANCIS SIBSON, M.D., F.R.C.P., F.R.S.,

SENIOR PHYSICIAN TO ST. MARY'S HOSPITAL.

MR. PRESIDENT AND GENTLEMEN,—Our age is marked by experiment and exact inquiry, directness of aim, and the skilled power to do the work required of us with completeness and economy. The labour of the past surpassed but not superseded; and while nothing that has been done is lost, invention awakes invention — discovery, discovery. Each advance is a fresh starting-point for the future labourer. It is, indeed, everywhere taken for granted that, good as this or that work may be, better work, more simple and more to the purpose, remains before us.

The ship, the bridge, the rail, the telegraph, and the gun of the present day, as compared with the past, are types and marks of the skill, precision, and advancing energy of the time. Medicine, too, partakes of this movement that is going on all around us. The knowledge of disease is becoming at the same time more accurate and more large. Each year gives us a better knowledge of what remedies can do, and what they cannot do. If the spirit of scepticism has shaken the belief of a few in the medicinal means at our command, that spirit has aroused inquiry and converted belief which is shifting into knowledge which is secure.

Those great old forms of medicine, the tincture of the muriate of iron, the sulphate of quinine, the iodide of potassium, opium, the infusion of digitalis, an occasional shot, but not a battery or running fire, of calomel, that have served our fathers, will serve us better. We know what they can do when they are wanted, and when they are not wanted, and with gathered power we apply them at the proper moment.

Then Science reaches forth her arms, and adds to those recently discovered remedies of the day just gone by, chloroform and bromide of potassium, the newly discovered agent of this very day, chloral acid. So our knowledge of disease ripens, and our aims in its treatment become more precise and vigorous, and men, all men, ask themselves at each step they take, why they do this or that; reason takes the place of routine, and rational medicine becomes the common property of the profession.

Side by side with the use of medicine, and not second to it, is the so-called hygienic treatment of disease—the study and regulation of the vital forces. The influence that the physician exercises over the mind, and, through the mind, over the body; the soothing or stimulation of the nervous power; the calming of exaltation, or the stirring up of apathy; the quieting of the over-busy brain, or the spurring of the flagging will; the repose of over-used powers, or the awaking of suspended vital functions; the subduing of the over-sensitive skin, or the stimulating of it when wan, muddy, and lifeless; the limiting of supplies to the over-fed frame, or the repair of the wasted body by the proper kinds of food and stimulants; the bringing into play, and so again into existence, muscle that had become wasted and paralysed by disease: these are among the aims that the physician seeks to accomplish, and these are among the means which he seeks to employ, irrespectively, but by no means necessarily without the use, of medicine; these are among the agencies that you hold in your power in the treatment of disease, and that you, each of you, exercise daily in coping with the various forms of malady, of ailment, and of constitution.

There is a method of treatment, that of rest and ease, belonging to this great class, that I have been employing with deep interest in cases of acute rheumatism and acute gout for some years. I think it not impossible that, as this subject interests me so nearly in its practice, it may interest you in its telling. I shall therefore at once proceed to narrate to you my experience in this method of treatment.

REST AND EASE.

During the last four years I have submitted all my patients in St. Mary's Hospital affected with acute rheumatism and acute gout, to a rigid system of absolute rest, protection from external injury, gentle pressure, equal warmth, and the removal of pain, chiefly by treatment from without. Those two diseases, so often apparently identical, differ essentially, as you know, in this—that, while rheumatism attacks those whose blood and tissues were previously healthy, and is produced by overwork and exposure, gout seizes upon persons whose blood and tissues are already affected, uric acid being found in excess. In acute gout, therefore, I gave iodide of potassium, and sometimes colchicum, with the view of expelling the special poison. But in acute rheumatism I gave no internal medicine during the active stages of the disease, unless it was called for by some special reason. I gave my patients no coloured or flavoured liquid to make them think that they were taking medicine when they were not doing so. I do not think it quite right; and I do not find it needful to employ such a planned system of fiction. If we do so we complicate the observations, and we deprive ourselves of the help that the patient will give us when he understands the aim of the method of treatment.

Whatever may be the line of treatment adopted for disease, the influence of that treatment on the disease itself is less than the physician is apt to think. The great majority of diseases tend to get well. They have, so to speak, a lifetime of their own, with its periods of growth, maturity, and decay. They are the passing tenants of the body, which they occupy, often with great injury, for a limited time. Treatment cannot change their nature—cannot expel them at once—cannot quench them—cannot materially shorten or prolong their existence. But treatment can lessen the sufferings of the body occupied by disease, shield it from outer injury, repair its waste, and

support and reinforce its powers; while it can ward off or re-awaken the disease, and lessen the intensity of its action, inflammatory or otherwise, especially upon the local structures. To watch, then, the treatment of a disease is to watch, not, so to speak, the remedy and its immediate effects, but the disease itself, and its behaviour during a certain method of treatment.

The thoughtful physician, while taking note of this or that change in the malady, knows that such change is due mainly to the natural growth of the disease, and does not attribute it to the means which he has employed, unless he have good ground for doing so. Having, however, a complete knowledge of the natural changes through which the disease passes, from its beginning to its end, he is able with something like precision to say that this plan of treatment has prevented the undue development of the disease, and has lessened its evil effects on the body. In studying, then, the progress of these diseases, acute rheumatism and acute gout, under this method of treatment—by rest and ease—we are studying the disease itself, and the swaying influences upon it that this method may induce.

In the examination of these cases, I shall avoid all comparison of them with the groups of cases of these diseases observed by other physicians, and even with those previously treated by myself in the wards of the hospital. How can you compare one set of cases with another set? Each patient has his own character, and his disease presents its own peculiar features. Cases unduly severe or unwontedly mild are apt to come in groups, extending often over a long period; and the strict comparison of one series of cases with another becomes therefore impossible.

From the summary of the cases placed in your hands, which contains a short narrative of each patient, you will see that, during the two years and a half ending May 1868, I have treated 101 patients on this method; and that of these 74 were affected with acute rheumatism, 23 with acute gout, and 4 with one or other of those diseases, these characters being doubtful. During a considerable period, my colleague, Dr. Cheadle, joined me in the examination of these cases.

It would be out of place for me to give you here a rigid analysis of those cases; but taking certain points of interest that present themselves in the series, I shall consider the affection of the joints, and the inflammation of the heart, in its interior and on its exterior, keeping steadily in view the influence of the treatment by rest and ease on the disease.

The Joints.—In a large proportion of the cases of acute rheumatism, the swollen and painful joints soon lost their pain, and diminished quickly in size, after the patients had been placed in bed, and the inflamed parts had been drenched with belladonna and chloroform liniment, and had been surrounded by cotton wool, with a covering of flannel pinned over it, so as to make a comfortable amount of pressure. Over all, the cradle was placed, to prevent the pressure of the bed-clothes; the toes being raised when the ankles were affected, so as to take the pressure of the tendons off their inflamed sheaths. The joints were usually at once relieved by the application of the chloroform, the belladonna keeping up that relief, and, as a rule, the swelling of the structures and the increased amount of synovial fluid diminished steadily from day to day, as you will see in the table illustrating this point, placed in your hands. The facts speak for themselves. In one man (411, Henry T.), the knee lessened from 15½ inches on the fourth day, to less than 14 inches on the sixth; in another (424, Henry F.) from 14½ inches on the first day to 12½ on the seventh. I need not mention to you other equally notable instances to the same effect, for they are printed on the table in your hands. I cannot, however, forbear mentioning one more case that excited some interest in the wards. In this patient, Mr. Salaman, now assistant-surgeon in our Indian Army, made careful measurements of the joints without disturbing them. The right knee lessened in size more than two inches from the first day to the fourth; and, what is still more remarkable, the right wrist measured ten inches on the seventh, and less than eight on the eleventh.

Sometimes the pain and swelling of the joints remained, or even increased, raising the temperature, distressing the patient, preventing sleep, and increasing the action of the heart. Then the application of leeches, or the injection under the skin of morphia, was employed, often with great relief, and with the effect, especially after the application of leeches, of lowering the heat of the joint and the temperature of the whole body, and so of calming the action of the heart.

The inflammation of the joints entirely ceased within eleven days in almost one-half, and within twenty-one days in five-sixths, of those patients that were not affected with endocarditis, and in those who were only threatened with it.

But the inflammation of the joints was much more prolonged and tedious in a large proportion of those affected with inflammation of the heart, within or without. Thus in less than a third of them were the joints free from pain before the eleventh day, and in almost one-half of them did the pain last beyond twenty-one days. Of these last, one-half experienced a relapse, which was often brought on by the too early use of the limbs after they were freed from the fetters of pain. In every case, with the renewal of the inflammation was there a return of the high temperature, the latter being undeniably caused by the former.

The illustration that I have given you becomes more striking if I put it into simple figures. Of 27 cases affected with endocarditis, the joints commenced to be influenced in 13 after the twenty-first day; while only 5 were so affected out of 33 of those who had no endocarditis, or were only threatened with it, as you may observe in the table placed in your hands.

This brings me face to face with the pregnant truth, that if we would treat the heart successfully, we must treat the inflamed joints successfully. By doing so, we remove four distinct causes, each of which requires from the heart a larger and more rapid supply of blood, and increased force of action. We do so, because we lessen the amount and rate of the blood sent to the inflamed parts; we diminish the temperature of the body, and often the amount of perspiration; we assuage the pain that of itself frequently gives violence to the beating of the heart; and we remove that mental distress, that anxious sense, that oppresses, and may even overpower, the action of the organ.

Before I leave the joints, I must touch upon that class of cases that present the great difficulty in treatment—that do not tend to get well—that cannot be classed with the gout series—and that yet differ altogether in their behaviour from those cases that happily form a large majority of the patients affected with acute rheumatism.

Of the 74 cases of acute rheumatism, in 19, or over one-fourth, were the joints inflamed for more than twenty-one days. In one-half of them there was a relapse, which was usually traceable either to the over-use or the exposure of the joint too soon after the passing away of pain and swelling. I find that this relapse tends to come on if the patient use the limb before three or four days have elapsed after the temperature of the body has reached its standard, and after all the joints are free from pain. I now lay this down as a rigorous rule of the ward, founded upon this observation; and of late these relapses have been much less frequent among my patients. And here it is that you must enlist the patients in the treatment. They nearly all desire to use their limbs, and to get up as soon as the pain has left them. When, however, you make them understand that if they do so too soon they will have a relapse, and that, if they have, the case may become much more tedious, and may, as I have seen, give rise to that tedious and intractable disease, articular rheumatism, they then cheerfully submit to the discipline.

But, besides the relapsing cases, I found a set of patients, amounting to one in seven of the whole, that retained the joint-affection for more than twenty-one days.

Among my patients, I found that the younger the patient, the more rapid is the recovery of the joints. Thus, of those at or under the age of twenty, in one-half the joints were well within eleven days; while, of those between twenty-one and twenty-five, only one-fourth were so within that time. The scale turned after the age of twenty; and, while in one-third of those between twenty-one and twenty-five, the joints were still in pain after the twenty-first day, they were so in only one-sixth of those who had not passed that age.

With increasing years there is a greater tendency to prolonged affection of the joints, and to relapses in those affected with acute rheumatism. I have felt that these prolonged cases, while they belong to the acute rheumatism

group, are yet partially allied to the gout cases, and that they tend to develop into that disease. This view is supported by the fact that several of my patients affected with gout, whose habits were not such as to engender the disease, had suffered from acute rheumatism when quite young.

I have for some time tended to treat these cases, as soon as they declare themselves, in the same way as I treat gout, giving the iodide of potassium, and sometimes the bromide, accompanied by tartrated iron, with, I think, good effect.

The cases of acute gout, on the whole, did well—all, in fact, but one of them, who died with double valve disease and contracted granular kidney. These patients derived the same immediate relief from the use of the belladonna and chloroform liniment, the application of cotton, and the protection of the cradle. While, however, those affected with acute rheumatism gained comfort from a moderate amount of pressure over the joints, made in the manner already described, those affected with acute gout could only bear very slight pressure. This pressure was always applied so as to be comfortable to the patient, and, if it ceased to be so, was immediately relaxed.

All the cases improved during the first few days. The joints were quite free from pain and swelling in twelve of them in eleven days, and in five more within twenty-one days. But the tendency to relapse in these cases was great, more so than even in those of acute rheumatism affected with endocarditis. Nearly half (eight out of seventeen) suffered from relapse, of those in whom the joints were well before the twenty-first day. Some of these relapses were caused by using the limbs too soon. The tendency to relapse was less frequent in those to whom the iodide of potassium was given early (usually the first day), than in those who took that medicine later or not at all.

The amount of urine increased somewhat when the iodide was given, but not always, as may be seen in the table. It would therefore appear that the amount of good done by the iodide is more than is accounted for by the increase of secretion from the kidneys.

The results, then, of the observation of my cases of gout, shortly stated, are these:—The joints rapidly improve under the influence of rest and ease, but they tend to relapse even when that method is carried out.

The tendency to relapse is lessened by the employment of iodide of potassium. It appeared to me that when I gave iron with the iodide the cases did quite as well as when that medicine was given alone. It is, therefore, desirable from the very first to combine the two, which I am now in the habit of doing; for it unquestionably tends to increase the amount of red corpuscles, and we know how deficient they become in acute gout. There is reason also to say that the iodide itself tends to lessen, rather than increase the red particles, unless by its administration, as in syphilis, the patient is restored to health, and so makes red blood in spite of the iodide. The form that I employ is the tartrated iron. I was desirous of seeing the effects of the iodide on the disease when treated by rest and ease, without colchicum, but the few patients to whom I gave that medicine unquestionably did well, and I feel certain that in these cases it is right to give it for a few days during the acute or inflammatory period.

The Heart.—It will have been seen from what I have just said that when I am looking at the inflamed joints in acute rheumatism, I am thinking of the heart.

How can it be otherwise? You see the limbs powerless; every joint swollen, tender, and painful, and the expression of deep helpless suffering on the face. The first turn of the mind is to find relief for that external pain. But you know that within a given number of days—you may count them on your fingers—those limbs, now so inflamed and shapeless, will lose their suffering, return to the symmetry of their form, and regain their power, and with it the strong desire to escape from their enforced weariness, and to exercise that power.

But you know that while the outworks are thus visibly attacked, the enemy is already in the citadel; and that this disease, which in its very nature attacks the limbs, in its very nature attacks the heart also, and at the same time that it attacks the limbs; that is to say, almost or quite at the very beginning of illness.

In my cases, exactly one-half were affected with inflammation of heart; and, in nearly every one of these, that inflammation pronounced itself by the immediate language of the heart itself, by pain in its region, by the anxious expression of the face and its dusky or glazed hue, and by the disturbed breathing. All of these may not be present at once, but they come in their order. And I would here say, that the murmur made by the blood passing in the wrong direction through the crippled valve is by no means the first indication in point of time.

In most of the cases of endocarditis contained in the paper now in your hands, the murmur was heard from the first. But some of them presented a much more impressive and more certain chain of evidence of the inflammation going on within the heart, than if you at once heard over the organ a murmur without that disturbance of the powers of life that always accompanies the disease during its acute stage.

Let me ask you to look at the case of Mary C—— (475, p. 6). On admission, tightness in the chest; next day, worse, face dusky; and then, on the third day, expression heavy but brighter, no tightness of the chest, but the first sound was prolonged almost to a murmur at the apex; and on the thirteenth day there was a distinct but feeble murmur at the apex.

Then take the very next case Charles H—— (402). On admission, heart's action tumultuous; uneasiness over the organ; prolonged first sound, or slight murmur; but, on the fourth day, that murmur spoke out, and was heard at the apex of the heart, and towards the armpit.

In a third, Harriet R——, there was pain over the region of the heart on the fourth day; on the tenth she was better; her face was not so flushed as it had been; there was then no murmur, but on the next day one appeared at the apex, showing mitral regurgitation.

Another instance is presented by Martha H—— (469), whose face was flushed on the day of admission, when she presented reduplication of the first sound at the apex. On the sixth day mitral and pulmonic murmurs were heard; and on the seventh, diastolic aortic murmur.

It is interesting to note the successive variations of temperature of the body in this patient, which was 101·3° on the fourth day, and fell to 99·3° on the seventh, when all the murmurs came into play.

In all of these instances the murmur, which was generated after the cessation of the acute symptoms of inflammation of the heart, disappeared in a varying number of days, and they all left the hospital free from heart-affection. But the result was not so happy in the last case of this class that I shall bring before you. It is that of Mary L—— (457, p. 9). On the day of her admission she was very feverish; breathing was difficult, and there was pain over the heart, but no note of murmur; the temperature was 100°. On the third day she was less feverish, and there was a prolonged murmur below the heart. On the following day, when the temperature had fallen to 97°, there was less pain over the heart, and she was more animated; but, unfortunately, to overbalance this improvement, there was a mitral bellows-murmur, which was even audible, though feeble, below the shoulder-blades.

It is, indeed, evident that the first effect of inflammation of the valve would not be to induce regurgitation, which cannot take place until exudation is deposited on the valve, or its structure is softened by the inflammation. This prelude of the murmur—of the crippling of the valve—in the form of pain, and flushed face, and anxious expression, is of great practical value, for it enables us to treat the disease in its very infancy, and before it has had time to damage the structure of the valve.

Pain in the region of the heart was present in thirteen, and pain in the chest or tightness in five more, out of the total number of twenty-eight who were affected with endocarditis. This is consistent with what we see in affected joints, where acute pain is present in the early stage, but tends to assuage when they become swollen. It was customary, when pain showed itself at the region of the heart, to apply over its seat the belladonna and chloroform liniment, with cotton-wool, or a poultice; and if the suffering was great, or was not removed by the liniment, a few leeches were placed over the seat of pain, which invariably produced relief.

These cases were, so to speak, at first dumb; but their very silence of suffering told you more than the loudest rasping or bellows sound, that would by themselves merely say,—Here is a heart not now inflamed, but crippled by a

bygone attack—bygone, but leaving its work done on the damaged structure of the heart.

In one-half of my cases the heart was, as I have just said, inflamed; but, in addition to those, three-fifths of the patients in whom endocarditis was not established presented unquestionable threatening of that disease; so that only a fifth of the whole number stand apart as being absolutely free from inflammation.

But it is not for me in this place to bring the striking phases of this disease before you, who are so practically familiar with them at the bedside. I will, therefore, at once say what was the result obtained in this series of cases, treated in the manner I have described to you. I have just mentioned those cases, amounting to twenty-two, in which there was a threatening of endocarditis. In all but four of these the first sound was prolonged usually at the apex, being, in some of them, murmur-like, or indeed an actual murmur. In twelve of these cases this sign was accompanied by pain over the region of the heart, disturbed breathing, flushed face, anxious countenance, or general illness. The prolongation of the first sound, when present, was generally audible on the first day, and it disappeared in most cases on the seventh or eighth day.

In the four other cases there was pain over the heart, and its sounds were either absent, or unduly loud, or accompanied by pulmonic murmur. In one only were the sounds of the heart absolutely healthy.

Why, then, under these circumstances, do I say that these patients were only threatened with endocarditis, and not actually attacked by it? It is because the suffering and the signs over the heart soon passed away, and the organ was left untouched by disease.

If we turn now to the cases of endocarditis, we shall find that fourteen of the patients, or exactly one-half, left the hospital well and free from cardiac valve-murmur. In one or two of them there was a murmur over the pulmonary artery, limited exactly to that spot, the second left space. But I need not tell you that this points out no valve disease, but merely too much action, too little blood, and too thin a blood in the right ventricle; and then, as the red corpuscles and the volume of blood increase, the sound vanishes.

The murmur as it disappeared generally passed into a prolonged first sound. In eleven of the fourteen cases of endocarditis in which the patients left the hospital free from valve-murmur, in three of those cases the prolonged sound preceded the murmur.

These cases show that prolonged first sound is closely allied to a valve-murmur, not merely by the character of its sound, but also by its actual relation to inflammation of the interior of the heart, whether established, as in the fourteen cases just referred to, or only threatened, as in the twenty-two previously alluded to.

Of the remaining cases, we held that seven came in with valve-murmur of some standing from previous disease. This inference was drawn from the loudness, situation, and quality of the murmur, the increased size and force of the ventricle, usually the right one, and the history of previous attacks, accompanied by symptoms over the heart, and followed by palpitation or shortness of breath on exertion. These seven cases came in with valve-murmur, and went out with it.

The only one of the seven cases that is open to question as to its nature, is that of Mary H. (445, p. 8); but, at the time, we made up our minds that she also had old mitral disease, after considering the many previous attacks, the history, and the murmur changing with the changing force of the heart; for inflammation is told in these cases by this very variation.

Of the remaining seven cases, four presented, after recovery from the attack of acute rheumatism, faint murmurs or prolonged first sound at the apex, very different from the noises heard during the acme of the disease. These four sustained, I hope, no permanent danger to the valves. The remaining three left the hospital with mitral murmur at the apex; and in them mitral disease was probably established. I say probably, for I have, and many of you must have, in view patients who have left the hospital with a murmur which has disappeared after a time, when they have returned as out-patients.

Pericarditis.—Perhaps one of the most striking peculiarities in the returns of these cases of acute rheumatism, is the very small number of the patients who have been affected with pericarditis. These amount to only six. I find that, if I had drawn the line so as to include two more cases, one of those patients came in with pericarditis. From the date on which that patient left the hospital, June 25th, 1869, to this, I can only find one additional case of pericarditis.

The abstract of the six cases is contained in the tables with which you have been furnished. It is, therefore, only needful for me to give a sketch of these cases. They were all males. Three of them were young men, from eighteen to twenty-one; and three of them ranged from twenty-eight to thirty-four years of age. The two more recent cases were also men aged twenty-two and twenty-nine respectively, the last patient being affected with gout.

It will be seen on examining the tables that a large proportion of my cases, amounting to thirty-two out of seventy-four, were at and below the age of twenty, and of these only three were affected with this disease. Besides these, two of the cases of endocarditis—John A—— (435, p. 7), aged twenty, and Mary L——, thirty-two (457, p. 2)—were affected with transient friction sound audible only one day, so that these cannot rightly be included among the cases of pericarditis.

Patients affected with acute rheumatism and acute gout are usually weakened and blanched in a remarkable manner, owing to the lessening of the whole volume of the blood and the diminution of its red particles. I gave, therefore, sooner or later, a proportion of them iron and quinine—preferring, as a rule, the old tried forms of the tincture of the muriate of iron and the sulphate of quinine. To a few patients, who were wanting in colour and strength, I employed the iron at once. I find that I gave it in the later stages of the disease to about four-fifths of those affected or threatened with inflammation of the valves, and to less than half of those in whom that organ did not suffer.

I am almost afraid to express the inference that I am about to draw, for I know that suddenly—to-morrow—I might begin to have a string of patients affected with pericarditis, and with endocarditis, producing serious and permanent mischief to the valves; but still I do feel, after pondering over it much and often, and weighing in the scale every theory I could think of, that my inference is supported by the small number of these cases of acute rheumatism that presented pericarditis, and the happy results in those who were threatened and affected with endocarditis, so large a number of whom left the hospital with valves faultless, so far as we could detect. But the inference is, that we do owe, to a marked extent, the small proportion of cases of pericarditis, especially in the young patients, and the happy result of those threatened and affected with endocarditis, to the care which is taken to keep the inflamed joints at rest, to shield them from external pressure, and to give them ease.

LOCAL DEPLETION IN RETROVERSION OF THE UTERUS.

To the Editor of THE LANCET.

SIR,—I have allowed Dr. Alfred Meadows to "steal a march on me" by the publication of his case in last week's LANCET on the cure of "Retroversion of the Uterus by Local Depletion alone." The views he has expressed, and the treatment he has adopted in this particular case, have been those entertained by me, and successfully practised for more than fifteen years, both in my public and private practice; and I regret that I did not, long ere this, make my views known to the profession. I am glad, however, that so sound and practical a physician-accoucheur as my friend Dr. Meadows has arrived, *independently*, at the conclusion I had so long ago come to as to the true character and treatment of certain uterine displacements; and I will, if you will permit me, corroborate, in an early issue of THE LANCET, the views of Dr. Meadows, by the brief report from my note-book of cases similar to the one so graphically related by him.

I remain, Sir, your obedient servant,

Brighton, August 9th, 1870. ALFRED HALL.

THE LANCET.

LONDON: SATURDAY, AUGUST 13, 1870.

AT the recent Comitia Majora of the College of Physicians, a resolution of much importance was passed. The President was empowered to invite representatives of the universities, the medical corporations, and such other bodies as it might seem advisable to summon, to a Conference at the College, with a view to adopting some means for arriving at principles of joint action which may satisfy all legitimate wishes of the profession with regard to the character of the Medical Bill which must be introduced into Parliament in 1871. We need hardly say that the idea meets with our fullest approval. We cannot sufficiently lament the miserable waste of force, and the unfortunate appearance of weakness and divided counsels within our ranks, which are presented by such squabbles as those which have been going on throughout the past session, and in consequence of which Lord DE GREY'S Bill has been withdrawn. That the Bill has been dropped is no misfortune; quite the reverse indeed. But it is most unfortunate and discreditable that the profession was so far from having made up its mind to any comprehensive principle of reform that the Lord President of the Privy Council was compelled to take the initiative in legislation, without the least certainty as to the feelings of the bulk of medical men with regard to some of the most important points in medical education and in the licensing system. We shall all be greatly to blame if, for want of a little decent statesmanship among us, and for want of that elevation of purpose which would lead us to look beyond the paltry interests of the moment, we fail to present to the Government, before the opening of the next session of Parliament, a comprehensive scheme of reform which may command the support of the whole profession.

On two main principles it is now quite certain that the profession will insist. First, it will insist upon the one minimum examination, independent of the corporations, for the right to practise medicine at all. Upon this point there is really no further discussion needed. Secondly, it will undoubtedly demand a radical reform in the composition and working of the Medical Council; but upon this point there is likely to be considerable divergence of opinions, and it is that to which we would chiefly call attention at the present moment.

There can be no doubt that a large numerical majority of medical practitioners desire that the profession at large should be directly represented in the Council. This feeling has been so clearly expressed that it would be useless to attempt to pass any Bill which did not recognise the principle; and whatever the practical difficulties may be in carrying it out, they must be overcome, and the experiment must be fairly tried. We hope that the Conference will not waste time in discussing any scheme which does not provide for direct representation.

A more moot point is the composition of the Council. We trust, however, that upon this question a very distinct understanding will be arrived at. One thing we feel certain of—that the Council can never command the confidence of the profession so long as it consists largely of representatives of existing corporations. Be it remembered that henceforth the State must undertake the responsibility of providing guarantees for the professional capability of the great mass of medical practitioners; and that it will do so expressly because the corporations, with their mutual jealousies and jobberies, have grossly failed in this duty. But there is a second and almost equally important change required in the Council—viz., a reduction of its numbers; for it is impossible, with so large a body of men as the Council now consists of, to prevent the whole affair from degenerating into a mere debating club of a very feeble type. We would seriously urge again our already expressed opinion that a much smaller Council than the present would do the work with half the noise and double the efficiency of the present body. And if it proved necessary, in order to secure the services of the right kind of men, that they should be permanently appointed and handsomely paid, we should not in the least shrink from that prospect; but we should then insist that it would be the duty of the State to bear the largest portion, if not the whole, of this expense. And we would once more beg the profession to remember that the constitution of the Council, so far from being a small and secondary matter, ought, in fact, to be looked upon as the vital point in any measure of reform. The Council, to be of any practical use, ought to be the fountain-head and the initiator of every movement of importance, whether as regards the education of the profession, or the maintenance of its honourable customs and traditions. The existing body is powerless; and the fact of its existence in a state of helplessness renders it a positive mischief instead of an advantage, and the first object of a movement towards general medical reform should be to replace it by a dignified and really powerful body.

THE French army has sustained terrible reverses, and Marshal MACMAHON'S retreating columns have left disabled, dying, and dead soldiers on the wayside and in the villages through which they passed. The world knows little, indeed, about the sanitary condition of the belligerent armies. The rapidity with which events, fraught with such momentous interests to the actors and the world at large, have succeeded one another, has left us little time to do more than read the telegrams. This rapidity has been more like that which characterises the plot of a sensational drama than the progressive development of real events in the great drama of contemporaneous history. With the political and military consequences with which this war is pregnant we can, of course, have nothing to do; indeed, it is easy to lose oneself in the mazes of conjecture about the complications that a day may bring forth. It is more than ever clear, however, that physical energy in the soldier, lightness of field equipment, and efficiency of transport are elements essential to success. Where so many marches and battles have to be compressed into a few days, the physical training of the soldier and the preservation of

the highest state of physical energy of an army become foremost questions in military economy. Moreover, as wars are now waged, all hospital equipage must be light and mobile if it is to accompany the rapid movements of modern armies, and each section of it must be complete in itself and available for any exigency.

DR. DE CHAUMONT, in his recently-published lecture on Military Hygiene, has laid particular emphasis on the due adjustment of the amount and quality of the food to the demonstrable requirements of the soldier in times of peace and war. The first winter that our army spent in the Crimea was, as everyone knows, terribly disastrous to it; and there were many causes for this, but the most obvious were starvation, overwork, and exposure. Nor were the soldiers the only sufferers: the very cavalry horses ate each other's tails from hunger. The storms of the Black Sea wrecked the vessels laden with the winter's supplies. To enable the soldier to discharge exceptionally hard work, he must be exceptionally well fed; and the war rations issued to the British, French, Austrian, Russian, and other armies, are insufficient mainly in their azotised constituents. This question of food for an army is a very large one, and but little satisfactory progress has been hitherto made in regard to it. The army of the United States, and that of the Prussians at Schleswig-Holstein, were especially well fed; and the Federal troops under General MCCLELLAN, when encamped on the swampy lands of the Chickahominy, were enabled to do without their rum ration on the advice of the medical officers.

The world is full of the Prussian successes, and those who are interested in their sanitary and medical organisation and administration will do well to turn to the report thereon by Surgeon-Major BOSTOCK, published in one of the Army Medical Volumes after the Bohemian campaign of 1866. The Prussian army, he tells us, is generally very healthy. The sickness is seldom more than 2·5 per cent. There is no colonial duty in tropical climates, as with us, to undermine the soldier's constitution; and there is little venereal disease, and almost no drunkenness. The Prussian soldier, passing a few years in the ranks, never loses sight of that home to which he hopes to return with constitution and character unimpaired. Prussian troops, moreover, are brigaded together in times of peace, and trained in all the arts of war, marching, and bivouacking on the field as if on active service.

We know pretty well what forms the field kit of the Prussian infantry soldier. He uses an easy, well-adjusted knapsack, and his limbs are comparatively unrestrained by his martial clothing. To judge from the experience of the last campaign, and considering the weather at this season, we may presume that the army took the field with comparatively few tents, except the *tente d'abri*. In 1866 the force with the Crown Prince was seventeen consecutive days without shelter; and no bedding or waterproofing was provided, straw, thatch, &c., being used as a substitute; and the sickness was small. The soldiers also occupied the dwellings in the different villages. Since that date the Prussian field hospital system and medical service have undergone thorough reorganisation. The distinction between heavy and light hospitals has been abolished; and every army corps of about 30,000 combatants has, on taking the field, twelve light hospitals, each calculated to afford relief to 200 sick or wounded men, and each furnishing a flying detachment and a depôt, as briefly described by our Prussian correspondent last week. In the opinion of the Prussian medical officers, and in that of other competent judges, the Prussian system of medical administration is very good and effective. In the French army the operations of the medical officers are most injuriously controlled, and often vitiated by the existence of a system of *intendance*.

The necessities of the war will doubtless compel the Prussians to adopt barracks, colleges, schools, &c., as hospitals for their wounded. In their last war these were placed in charge of civil surgeons, and the nursing was undertaken by sisterhoods. The Germans are fully alive to the necessity of good ventilation, and ample cubic space for surgical cases; and the "open air" principle will, no doubt, be followed as far as practicable. The delay which has ensued in sending out some of our military surgeons to the belligerent armies is, in our opinion, greatly to be regretted. We cannot afford to lose that instruction which can only be obtained by experience during a campaign. We require to know what is the working of the newly-organised Prussian medical system, in connexion with and dependence upon other departments, and what their authorities have found to be the necessary proportion of medical officers, administrative and executive, to the strength of an army in the field, with the number of those actually in the field to those at the bases of operation. Then there are the questions of the new arms and projectiles in relation to the gravity of wounds; the utilisation of railroads as a means of transport, and the influence, if any, that this method of conveyance had in modifying treatment, or deferring surgical operations; and the working of the new system of the Geneva Convention, in regard to all that concerns the wounded, besides no end of questions of surgical or pathological interest.

WHILE war is raging in Europe, and while the brief messages of the telegraph have been big with the fates of dynasties and kingdoms, the British Medical Association has met at Newcastle-upon-Tyne; and its members have enjoyed, let us hope, an agreeable and instructive gathering. The distance of the Tyne from London has naturally interfered with the presence of some of the chief metropolitan lights of the profession, but their places will have been well filled by the talent and industry of many eminent members of our craft from the populous and thriving towns and cities of the north. The communities that win their subsistence in great measure from the bowels of the earth have always been famous for the care with which they have sustained their physical powers; and we make no doubt that the feasts spread before our brethren have been varied and plentiful. The Address in Medicine was delivered by Dr. SIBSON, who can never be otherwise than pleasant, even on the rare occasions when he fails to be profound. The ancient University of Durham has done honour to itself in honouring the medical visitors to its locality. The industry of the gentlemen whom it is customary to describe as

"the working bees" of the profession provided ample store of the sweetest and most nutritious intellectual honey for those whose tastes, or whose energy, or whose conscientiousness led them to frequent the meetings of sections and to take part in debates. The beauties of nature and the triumphs of art held forth their respective allurements, and visitors could either study the attractions of the earth's surface, or descend into its depths in mines. With such multiplied resources time must have sped swiftly, and so the meeting has come and gone.

We greatly fear that the very attractiveness of this programme may itself have been a source of weakness to the meeting. The Association is the only body that can be said to be representative of the profession, and the present conjuncture is one in which its voice should be heard with no uncertain sound. Acting in its name and on its behalf, Dr. WATERS has lately done good service in assisting to procure the abandonment of the objectionable Medical Bill that was put forward by the Government; and Dr. CHARLTON, in dealing with this subject in his Address, has shown his full appreciation of the real questions that are at issue. There can be no doubt that he will carry the profession with him, as he carried his auditors, in his description of the points for which we all should strive; and that the verdict of the Newcastle meeting will be referred to, in the House of Commons, as an explicit expression of the wishes and the opinions of the medical profession.

There are, however, other matters, of great if not of equal interest, on which also the decision of the Association should be pronounced. There are many questions connected with sanitary law and kindred matters, and especially with the relations that practitioners, in some of their duties, should bear to the State, on which it would be well that such a meeting should speak plainly. We know how difficult it often is for our brethren to get a holiday from their daily work, and how great is the temptation to use such a holiday for purposes of pure enjoyment. But we nevertheless feel much inclined to appeal to the Council of the Association for the devotion of more time to public business. The pic-nic element in the present meetings is a very large one, and the medical and surgical papers read in the sections would in many cases be very acceptable either at branch meetings or in London Societies. We feel sure that the usefulness of the annual gathering would be increased if its powers could be directed, more exclusively than they are at present, to the subjects on which the profession is called upon to instruct the public.

PROCEEDING to the consideration of those effects of long-continued masturbation which require surgical treatment, we shall find some patients who present nearly the following conditions:—The external genital organs are in a state of impaired nutrition, and irritable, in the sense that irritability is debility excited. The penis is small; the testes are small and soft; the scrotum is pendulous; the spermatic veins are often varicose and distended. A partial or imperfect erection of the penis is produced with great readiness, and is attended either by a feeble ejaculation of semen or by the escape of some prostatic mucus; and similar mucus escapes after the evacuation of the rectum or of the urinary bladder. In such cases, according to LALLEMAND and others, there is a state of special vascularity and tenderness of the openings of the prostatic and seminal ducts in the urethra; and this state serves as a source of reflex irritation to promote secretion and discharge. It is even said that the condition described may be detected by the catheter, and that unusual pain is felt when this instrument reaches the region implicated. The test is not a very trustworthy one; because the patients belong to a hypersensitive class, are usually wanting in fortitude, prone to exaggerate their sufferings of every kind, and constantly on the watch for their own sensations. Nevertheless the existence of such a condition seems to be highly probable; and the treatment founded upon the supposition will often afford relief. That treatment consists, as is well known, in the direct application of some form of caustic to the urethra. The solid nitrate of silver was the application advised by LALLEMAND; and Mr. ERICHSEN has recommended the use of an aqueous solution, injected by means of a syringe catheter. It is probable that the best application would be the solid nitrate, diluted with nitrate of potash and fused into sticks. This can be made of any strength that is desired; and, while the dilution may be thus secured, the place of application may be more exactly determined than by the injection of fluid from a syringe. Upon this point it is unnecessary to enlarge, since the details are given in almost every systematic work on surgery. In so far as seminal or prostatic emissions are due to urethral irritability, there is no doubt that they may be cured.

The point of next importance is the frequently impaired nutrition of the testes, and of the parts accessory to them. Mr. LEE has shown how frequently wasting of the testes is produced by varicocele; and varicocele is a common complication in these cases. According to its degree it may require simple support, or compression of the veins by a truss, or an operation for their obliteration; but it is a complication that should never be neglected, since, even in its slighter degrees, it would materially retard any process of repair. When it is not present, or when it has been overcome by treatment, the exhausted organs will, as a rule, require only functional rest for their complete recovery. If the patient, with or without the aid of blistering, will abandon the practice of masturbation, and if the involuntary discharges are checked by cauterisation, the genital function will in most cases, even the most unpromising, be eventually restored. The probability of such a result being obtained has induced many well-meaning writers to advise marriage to enfeebled or seemingly impotent patients, under the single injunction to be content with very moderate endeavours to exert their powers, and in the hope that the function would respond to a natural call upon it. Instances are on record in which almost infantile organs have undergone development under this stimulus, and others in which the debilitating effects of masturbation have been completely recovered from under the same influence. Notwithstanding this, we hold that to advise a man of questionable powers to marry, in the hope, or even with the probability, that he may gain strength in consequence, is at once immoral, unscientific, and unmanly. It is subjecting the health, the happiness, and even the virtue of a woman to

risks that she ought not to incur. Family practitioners well know how large a number of uterine maladies are directly traceable to ill-assorted unions; and it would be hardly possible to inflict upon a bride a greater physical evil than a marriage which should awaken her own sexual desires, and then utterly fail to satisfy them. The men who are the subjects of sexual weakness are, as a rule, inexpressibly nasty; and are not calculated to strengthen a woman under such adverse circumstances, or to improve the moral tendencies of her character. In many instances nature will secure the wife against uterine disease by arming her with a loathing for her husband which renders it impossible for him to excite in her anything except disgust; and then it is not unusual for her to solace herself with other men, or to desert her home for some more capable companion. It cannot be said that a surgeon will be justified in giving advice that may not improbably lead to such issues as these. The restoration of generative efficiency to a patient who has thrown it away is, doubtless, a matter of great importance to himself, but of very small importance to the world at large. In the interests of society, it would be better to emasculate him at once than to hand over to him the health, happiness, and honour of a woman, to be used as remedial agents in his behalf, and to be sacrificed in case of a failure. The surgeon should teach his patients that marriage might, indeed, be the reward of self-denial and of abstinence from masturbation; but it must not be undertaken as an experiment, or prior to the decided return of a capacity for the due performance of the function that it involves. The utmost benefit that can be gained would not be tantamount to the evils of possible failure.

And here we take our leave of this subject, upon which we have only written for the sake of setting what we conceive to be a good example, and in the hope of persuading teachers of surgery, and all whose business it may be, to pursue it into its details as a necessary and legitimate branch of practice. The winter session is drawing near, and we trust that lecturers will not lose sight of a matter of such grave importance. To deal with it fully and plainly will not only help their pupils in their future work, but may also help them greatly while yet *in statu pupillari*. The subject is one of especial interest for young men; and many medical as well as other students would be personally thankful for sound teaching and right guidance with regard to it.

A VERY pretty quarrel appears to be imminent between the Metropolitan Asylum managers and the Poor-law Board. Unlike boards of guardians, this central body is composed of various members of Parliament, justices of the peace, &c.; in fact, of the *élite* of the metropolitan guardians with the addition of certain nominees of the Poor-law Board. These gentlemen have devoted an enormous amount of time and attention to their duties. They have erected two large establishments for the reception of 3000 imbeciles; and the probable expenditure will not be less than £60,000 a year, and may possibly be more. The institutions, being at a considerable distance from town, will not be much under the personal control of the managers; and, in the interest of the public and for their own satisfaction, they desire to have a full and efficient staff of officers. They have accordingly elected two chief medical officers, with a salary of £500 each; and they propose to elect a clerk at a salary of £180, and to give him the assistance of an office clerk. Of course there will be a steward to superintend the stores, and he also will be provided with a clerk. The Poor-law Board have objected to these arrangements. They are of opinion that £150 is sufficient salary for the chief clerk, and that he should be satisfied with half the services of the steward's clerk.

The managers are exceedingly indignant. They have unanimously resolved to insist upon their views being carried out, and it is stated that they will resign in a body should the Poor-law Board refuse to yield. They say that the matter is not one of a clerk more or less, or of £30 in salary; but whether a number of gentlemen who have given so much time to the question are to be allowed such freedom of action as will enable them to perform their duties in a satisfactory manner, or whether they are to be considered as tools and servants of the Poor-law Board.

At Hampstead objection was taken to the wages of a kitchen-maid. The managers thought 30s. a month a reasonable sum, considering the exposure to infection. Not so the Poor-law Board. And if the Poor-law Board wish to carry out their control to such details, it is argued that they had better manage the whole affair.

The fact is, the staff at Gwydyr House have been so accustomed to interfering with boards of guardians, and have so frequently sanctioned contemptible expedients for saving money, that they have been tempted to try it on with gentlemen of intelligence and common sense, who know how wretchedly every sort of Poor-law officer is paid, and how badly the public is served by them. We shall watch the affair with great interest. At present the duties of the Poor-law Board are anomalous and undefined. They are neither administrative nor inspectorial, but a jumble of the two. No one would object to their issuing definite instructions on all matters of principle; and we believe the better the class of managers, the more ready would they be to treat such instructions with proper respect. But it seems only reasonable that the responsibility for details should be left in the hands of those who have to give an account to their constituents of what they do. What is wanted is a better definition of the range of duties belonging respectively to the central and local authorities, and it will be a happy result of the quarrel if this should be attained.

Medical Annotations.

"Ne quid nimis."

THE MEDICAL REFORM UNION.

THE late Provisional Executive of the Medical Reform Union has published a retrospect and a balance-sheet. Its review of the history of the medical reform agitation and its results, and its want of results, is clear and suggestive. It notices two facts which ought to be remembered, showing the difficulty of securing large numbers of medical men in meetings: the first fact is, that a meeting of the Medical Reform Union, held in London, and very extensively advertised, numbered only fifty-five members of the pro-

fession; the second, that an appeal of the Council of the College of Surgeons to the Fellows and Members to assist them in reinstating the celebrated 18th Clause, was responded to in a meeting of only forty-six persons, including representatives of the press and the beadle of the College. The unsuccess of this College attempt at a meeting may be partly attributed to the way in which the Members and Fellows were restricted, like good boys, to the one point which the Council in its wisdom thought fit to have discussed.

It must not be hastily assumed from the fact of small meetings that the profession takes no interest in the questions which must soon be settled in an Amending Medical Act. This notion is refuted by two facts:—First, that £600 was subscribed by the profession to defray the expenses of the great Memorial, which remains, and will remain, a powerful historical fact. The balance of £12 due to the treasurer will doubtless be defrayed by those who have not already subscribed. The second fact is that the profession did actively and efficiently petition Parliament and instruct members against the Government Bill. Medical men have little time to attend public meetings, and, moreover, they have been kept so much at a distance by the close corporations of the profession, that they have not been encouraged to take much interest in questions affecting the education and status of the general body of practitioners.

The Executive deserves the thanks of the profession. It has now virtually ceased to exist, but not before giving a great and powerful impetus to the cause of Medical Education and Reform.

A DEATH IN A GAOL.

A SAD story, and one that calls for further investigation, comes to us from Cardiff. It seems that a man named David Howells, who had once held a respectable position in the town, but had fallen from it into habits of drunkenness, was brought before the magistrates for having neglected to provide for his family, and was sentenced to a month's imprisonment with hard labour. When committed, he had been drinking, and, according to the testimony of a policeman, "was shaking all over, and had the horrors." It is also said that he had taken no food for two days previously. He was conveyed to the gaol on Monday, the 25th of July, and the next day was put to the treadmill. On Wednesday morning he was again put to the treadmill, but the chief warder noticed that he "appeared to be unwell, and suffering from the effects of drink." He therefore took him off the mill at noon to see the doctor, or rather to see Dr. Morgan, the doctor's assistant. Dr. Morgan ordered him what was called a shower-bath, but seems from the description to have been a douche of a punitive character, and did not relieve him from his labour. He therefore returned to the wheel, on which he worked that day for nine hours in all. When he finally left it, at six in the evening, he was "restive, and would not come near the other prisoners," and when brought to his cell "became very violent." Dr. Paine, the gaol surgeon, was then sent for, and he and Dr. Morgan came about eight o'clock. They ordered the man to the infirmary, gave medicine for him, and prescribed arrowroot and brandy every four hours. Two prisoners, "with instructions," were set to restrain him, and the arrowroot and brandy were left with the night watchman, to be given at the stated intervals. Before the time for the third dose came round the man was dead; and Dr. Paine, being sent for, came to the prison at half-past two in the morning, and looked at the corpse. An inquest was held at a very early hour in the morning, and was concluded before the representatives of the local press knew that it had been commenced. The verdict was so little satisfactory to the inhabitants of the town that they are appealing to the Visiting Justices, and, failing them, will appeal to the Home Secretary, to hold a full and public inquiry. We trust that it may be speedy and complete.

Perhaps the life of the poor tipsified wretch may be no great loss to society, although it is quite possible that a period of judiciously-managed imprisonment might have paved the way for his reformation. But a month of hard labour is not intended to be a capital sentence, and ought not to be permitted to become so. Judging from the evidence that we have received, the medical attendance at the Cardiff gaol must differ from the Irishman's sedan, chiefly in being *plus* a cold shower bath; and we can conjecture that, but for the name of the thing, the prisoners would be absolutely better without it. It seems almost inconceivable that any man could allow a patient who was actually within fourteen hours of death from delirium tremens to be subjected to the shock of a cold douche, and then to return for six hours to a treadmill. This, however, might have been an error of judgment, springing from mere ignorance and incompetence. But what shall we say of the gaol surgeon himself, who saw the patient only six hours before his death, who learnt what had been done by his deputy, and who was then content with ordering medicines, leaving the nursing in the hands of "two prisoners, with instructions," and going quietly home to his bed. The urgency of the case surely required that the means of procuring sleep, and of supporting strength, should have been controlled by medical skill and knowledge, and not left to the charge of two ignorant prisoners, who could not even be trusted with the custody of the brandy. We may just add one word of general warning. It seems only too likely that the chief warder suspected the man of shamming illness, and that the surgeon's assistant suffered himself to be guided by the warder, and to be used as a cat's-paw for the administration of punishment under the guise of treatment: he, in this case, himself "shamming" to be acting as a doctor. Now it is the business of a gaol surgeon to protect and heal the sick, but it is not his business to punish the healthy. His functions end when he has expressed to the authorities an opinion that his medical services are not required. It is proper to add that, in the case that has called forth these observations, we have heard something about the use of a shower-bath *as a means of diagnosis!* Between what conditions would it enable the prescriber to discriminate?

ENCOURAGEMENT FOR NAVAL MEDICAL OFFICERS!

THE cheese-paring proclivities of "my Lords" with reference to the administration of Greenwich Hospital have taken a curious phase in the reorganisation of the school. This establishment is to be remodeled on the "industrial" plan; a superintendent has been attached, and "a young medical officer" is to be (or rather has been) appointed with reference to his especial experience in the diseases of children. He is to act for the superintendent in his absence, to inspect the boys and their dormitories daily, and to be responsible for the dispensing of his own medicines, and, indeed, "to make himself generally useful." The school now, as heretofore, will afford accommodation for 800 boys; and, under the old system, the hospital staff consisted of a staff surgeon of the navy, a dispenser, a matron, sick attendants, a cook, and three nurses,—at a total annual cost of £436. The late medical officer (Dr. Vaughan, R.N.) was appointed only a few months ago, at the instance of the Medical Director-General of the Navy, and on the distinct understanding that he should retire when sixty years of

age. His duties commenced only in March last, when the reduction of the Greenwich Hospital establishments was wellnigh completed. He has now received his *congé*, and, indeed, ceased to hold the appointment on the 1st of the current month; thus showing how utterly indifferent the Admiralty authorities are as to using any means to popularise the medical service of our Royal Navy.

We may observe, parenthetically, that, according to our own knowledge and belief, Dr. Armstrong was entirely ignorant of the line of action about to be taken by the School Committee of Inquiry, and was not officially consulted by them as to the proposed changes. Meanwhile a young civilian has been appointed to the post, who, be he ever so efficient and ever so energetic, will find considerable difficulty in performing the multifarious duties entrusted to him; including the dispensing of his own prescriptions, and the performance of all casualty or other operations single-handed. And the surprising part of the matter is, that while the staff of nurses, attendants, &c., is reduced, the proposed expenditure will be less than that above quoted by £16 a year! And we are told that, at the competitive (?) examination for navy assistant-surgeons being held this week, there are 15 candidates and 25 vacancies. *O tempore! O mores!* If penny-wise policy were trumps, what a hand "my Lords" would hold!

OLLIER'S RESECTIONS.

M. OLLIER, of Lyons, has recently submitted to the Academy of Sciences of Paris, the account of two cases of resection of the elbow-joint, which prove the regeneration of bone by the periosteum. The patients died; one eighteen months, the other one year, after the operation. The first was nineteen years of age, and the other forty-nine. The young patient fell a victim to phthisis. The lower part of the humerus was, with him, the part most regularly regenerated. With regard to the other bones, an olecranon of one inch had been formed, and the ulnar nerve was observed lying in a groove on the new condyle. The head of the radius, however, had been very imperfectly reconstructed. The insertions of muscles, which had been detached during the operation, had regained their normal relations. The joint did not, however, look healthy, because in the latter part of the patient's life suppuration had set in.

The second patient died of albuminuria. The lower part of the humerus presented two lateral masses very fairly representing condyles; the olecranon was observed to consist of a series of osseous nuclei lying in the tendon of the triceps, and the insertion of muscles which had been dissected off had formed new and normal connexions.

M. Ollier considers that these cases offer a clear demonstration of the correctness of his views. We should like to know whether, in old cases of caries of the joints, the Lyons surgeon does not, now and then, find the periosteum so completely destroyed as to put the performance of his operation out of the question. Perhaps we do not operate so early as they do in France.

THE MEDICAL REGISTER.

WE have more than once had occasion to remark on the extraordinary proneness of our brethren of the general press to confer a medical title upon any offender against the law who has hardihood enough to confer one upon himself. Nothing is more common than for some villanous quack, or abortion-monger, or other scoundrel, to be brought up at a police-court, and to call himself "Dr.," or "a surgeon," or "a retired surgeon," as the case may be. He appears next day in the newspapers as Dr. A, or as John B, a surgeon, as if his tale were at least a probable one; and this is the work of reporters and editors who would certainly not say more than that a prisoner had "alleged" himself to be a barrister or a clergyman. The conduct of our brethren of the press is in this matter the less excusable, because the imposture attempted is so easy of detection. There exists a book called the "Medical Register," a copy of which forms part of the furniture of every court of law. This book contains a list of medical practitioners, and of their respective titles; and, although it is not absolutely free from error, it would be a very remarkable coincidence if the few men who may be wrongly placed in it, or wrongly omitted from it, should also find themselves at variance with the criminal law. For an accused person to call himself a member of the medical profession is becoming as common as it once was for the heroes of the night charges to be "medical students;" and we beg leave to suggest to magistrates that they should require every *soi-disant* surgeon or doctor to state his name in full, and the exact nature of his medical qualifications. A reference to the Register, always at hand for the purpose, would at once strip most of these mischievous jackdaws of their borrowed plumes; for they would hardly be bold enough actually to personate some existing individual by whom the personation would be promptly repudiated and resented. There is too much human nature in man to render it possible that our profession should never furnish a single misdemeanant; but the claims to medical status recently advanced in our police courts have been not only false but preposterous. In the name of an honourable profession we feel that we are entitled to request magistrates and editors to remember the existence of the Medical Register.

OPERATIONS IN COTTAGES.

THE *Western Morning News* contains, in its notices to correspondents, an abstract of a letter, sent to it under the signature of "Observer," which raises a question of some importance to the profession. We know nothing of the case to which the letter relates, but our contemporary says that "Observer," "writing in reference to a death which has ensued after ovariotomy, questions whether such serious operations should be performed in a cottage, while public institutions, provided with proper accommodation and appliances, are within reach, and may give the patient an additional chance of life. If such dangerous operations continue to be performed in private cottages, it is very desirable, 'Observer' contends, that the principal surgeons of the neighbourhood be invited to assist, which was not done in the case alluded to."

Admitting the possibility that this letter may have been written in entire good faith, it yet seems to bear upon its surface the aspect of a covert attack upon the to us unknown operator, who, from the expression "the principal surgeons of the neighbourhood," we take to be a new comer in his locality, and probably a young practitioner. If this be so, we hope that the "principal surgeons of the neighbourhood" have already shown their fitness for the positions they hold by making common cause to protect a weaker brother from unjust censure, and that they have anticipated us in carefully explaining what, in such a case, are the duties of the surgeon. Operations performed in cottages are, *ceteris paribus*, less likely to be fatal than those performed in public institutions; but they require an amount of personal care and subsequent attendance on the part of the operator from which hospital surgeons are relieved by dressers and skilled nurses. A young surgeon, whose ideas of the management of patients after operations are based upon what he has seen in large hos-

pitals, would be very likely to underrate the demands which a serious operation in a cottage will make upon his time, or the extent to which every detail of nursing will require his constant supervision. It is not desirable to undertake capital operations in cottages in the presence of engagements that would forbid such supervision; but if it can be given, the surgeon is incomparably the best nurse, and after the operation wants only manual help from his assistants. Some of the greatest triumphs of surgery have been achieved in this way, and notably the first English case of amputation at the hip-joint, which was done by the late Mr. Orton at a cottage in Leicestershire. Then, with regard to inviting the principal surgeons of the neighbourhood to assist, there are several aspects of the question. In the first place, the operator should always have assistants enough. Nothing is worse than to be short handed at an operation. In the next place, he should never suffer himself to be pressed upon or crowded, and he should never suffer the presence of anyone who might unnerve or embarrass him by unfriendly criticism, by interference, or by gratuitous suggestions or advice. The operator is the best judge of what assistance will conduce to his own comfort and self-possession; or, in other words, to the success of his operation and the safety of his patient. Moreover, it should be remembered that there are many localities in which the "principal surgeons" have never performed ovariotomy, and in which, therefore, their presence as assistants would be attended with no particular advantage.

NEW YORK BOARD OF HEALTH.

WE have many times alluded to the want of co-ordination in the reports of sanitary work done annually in London by the medical officers of health, and to the importance of having a published yearly Metropolitan Sanitary Record, so that in a single volume one might study the progress of sanitation in London as a whole. At present there is only one class of sanitary facts—namely, the mortuary statistics of the Registrar-General—which is systematised and made available with promptitude and regularity soon after the close of each year. The health officers, from their local knowledge, are in a position to contribute valuable information of a medico-sanitary character, but only a few of them do so, and the time and manner of publication adopted by them are mostly independent of method or design.

Two years ago we drew attention to the contrast between London and New York in this respect; and we are again reminded of it by the appearance on our table of the Fourth Annual Report of the New York Board of Health, relating to the year ending 31st Oct. 1869. This volume of nearly 600 pages contains an astonishing amount of sanitary lore. There are separate reports from the president and treasurer, from the sanitary superintendent and his staff of medical inspectors, and, in short, from every official of the board, upon his own specific branch of administration. We must be content for the present to note the fact that, in addition to the features common to sanitary reports in general, this New York Report deals, from a State point of view, with many other subjects coming within the legitimate province of a sanitary board, but which we in this country are accustomed to see left pretty much in the hands of private investigators. Take, for instance, the reports on the Sources of Unhealthiness in Crowded Assemblies and Places of Popular Amusement and Resort, on the Quality of the Milk-supply of the City, and on Poisonous Cosmetics. The New York Board of Health has control over the water, food, and gas supplies of the city, over the management of tenement houses, over offensive trades, and over the quarantine arrangements. We may possibly recur to this Report on a future occasion; meantime we trust that it will come under the notice of the Royal Sanitary Commission and of the Home Secretary. Mr. Bruce has promised to deal with the government of London next session, and it will be as well that he should make himself acquainted with the manner in which the requirements of sanitary science are met in the metropolis of the New World.

STRUCTURE OF THE ZONULA CILIARIS.

A DISSERTATION has just been published by Dr. F. Merkel, of Gottingen, on the Zonula Ciliaris of the Eye, which presents some points of interest. He states that his researches demonstrate the zonula to be a band of triangular form on section, springing from the apices of the ciliary processes, and extending to the margin of the capsule of the lens, to the anterior and posterior surfaces of which it is attached. The so-called canal of Petit does *not* exist in the living animal, and the zonula contains no fluid but what it is capable of imbibing. It commences at the pars ciliaris of the retina, to which it is most intimately connected; and here consists of the fibres so well described by Henle, which can be easily demonstrated by tearing away the zonula in an eye that has been soaked for a few hours in a solution of chromic acid containing one-sixth of a grain per ounce. The fibres are very fine, stiff, and straight, and are probably not united into a membrane, but lie free on the surface of the vitreous. They are to a certain extent elastic, as they often assume a wavy form. Near the commencement of the zonula ciliaris are numerous cells, each with large nucleus and small amount of cell-substance, which form only a single layer, though by no means lying in the same plane. Besides these most posteriorly situated fibres, the ciliary zone, as it passes forwards towards the apices of the ciliary processes, increases considerably in extent by the accession of fresh fibres. The fibres pursue three main directions: a few turn back and end in the vitreous, the majority run from the apices of the ciliary processes towards the lens, and a few run circularly; the latter have a more internal position than the former. Dr. Merkel considers the canal of Petit (so generally admitted) to be an illusion, and due to the facility with which the fibres break down and separate from each other; and he supports his view by reference to the results obtained by injections made with Prussian blue, and by preparations made by staining with nitrate of silver. In neither case can the presence of a distinct membrane be demonstrated. In regard to the physiological value of the zonula, Dr. Merkel entirely accords with the view expressed by Schwalbe—that it constitutes the antagonist of musculus ciliaris, and effects the flattening of the lens.

MEDICAL POOR-LAW RELIEF IN BIRMINGHAM.

THE Poor-law Board have again been compelled to temporise with the guardians of Birmingham on the subject of medical relief. It is well known that these local magnates are quite satisfied with their own defective arrangements, and that they are only waiting the opportunity of discharging those unfortunate medical officers who have had the temerity to express their dissatisfaction with their present position under which they are compelled to supply and dispense medicines at salaries not more than sufficient for their personal remuneration. The guardians consequently prayed for time, and offered some indefinite promises to take the question into consideration before the expiration of the year for which the medical officers were temporarily elected. This prayer the Poor-law Board has granted, and for another year the poor will certainly continue to suffer

from the acknowledged and serious defects of the present arrangements. One promise the guardians have made—viz., that they will in future elect their medical officers permanently; but they give no pledge that they will elect the present holders, and the Poor-law Board have not the courage to throw over them the protection which an enforced permanence will alone give them. Instead of this, which we have no hesitation in promising would not in the least interfere with any prospective alteration of their duties, which could not possibly be more unsatisfactory, they have reminded the guardians of the "great injustice which would be inflicted on the medical officers, if, because when pressed for their opinion on the merits of the present arrangements they stated their opinion frankly and without reserve, any prejudice should have been created against them in the minds of any portion of the board of guardians."

The Board again express their opinion that the present system is deficient, and that they will be obliged to insist on a change. But we cannot help observing that if the change be left until the guardians are disposed to approach the subject with every disposition to meet the necessities of the case, as the Poor-law Board innocently assume they will be, it will probably be some years more before the sick poor of Birmingham are properly relieved, and the medical officers reasonably paid.

If Mr. Goschen had informed the guardians that he would exercise the discretion vested in him by law of refusing his signature to the reimbursement of any part of the officers' salaries from the Consolidated Fund whilst the present defective system continues, he would have soon opened the eyes of the guardians to the necessity of introducing such arrangements as he could approve. When shall we have anything like administrative capacity displayed at Gwydyr House? Year after year a great muddle goes on, and there is presented to the public the sad spectacle of a State department haggling with guardians for bargains which are amply secured to the poor by law, and might readily be obtained for them by the exercise of a judicious firmness.

CHELSEA HOSPITAL.

THE Report of the Committee appointed to inquire into the establishments of Chelsea and Kilmainham has just been promulgated. Chelsea Hospital accommodates 538 in-pensioners. No candidate is admitted under fifty years of age, unless suffering from the effects of a disability contracted in the service, or unless specially fitted for some employment in the hospital. The age of the oldest in-pensioner at the present time is ninety-four; and there are 169 between seventy and eighty, and 58 between eighty and ninety. The average cost of each pensioner is 2*s.* 3*d.* a day. The Committee speak in high terms of the general arrangements for the wellbeing and comfort of the inmates in the hospital and the infirmary attached to it. No case has occurred of a man leaving the establishment on account of his being dissatisfied. Chelsea is, nevertheless, unpopular with the service, and the causes of this may be readily surmised. Pensioners naturally prefer to rejoin their friends, and partake in those associations which men in their class of life enjoy. Although the men would generally consider an increase of out-pension as superior, probably, to the advantages to be derived from residence within the walls of the building, it would seem that there are several considerations to make the Committee hesitate before acceding to this. In the first place, a large number of the in-pensioners are either patients in the infirmary or require frequent medical attendance; and it is almost certain that, in many of these cases, no amount of increased pension that it would be practicable to give would enable them to be cared for outside the hospital as they are now cared for. It is, moreover, thought probable that if the men were made out-pensioners with an increased pension, many of them would find their way to workhouses, or become the prey of lodging-house keepers. Although the Committee regret the existence of disadvantages inseparable from the monastic character of the institution, and the separation from friends and families involved, they are not prepared to recommend the abolition of the system. They think that some reduction might be made in the administrative staff of the establishment, without impairing its efficiency; and that its monastic character might be overcome by making some arrangement for the reception of a limited number of married pensioners, with their wives, inside the institution. The Committee make other recommendations, into which we need not enter; but it is gratifying to find that the condition of those in Chelsea Hospital contrasts so favourably with that of the poor in our workhouses. The hospital is, in fact, an almshouse of the best description, for the most infirm and helpless of a body of about 64,000 pensioners, with no greater disadvantages than are inseparable from such institutions. The Report of the Committee, although nominally upon Chelsea and Kilmainham hospitals, deals exclusively with the former.

UNQUALIFIED MIDWIFERY PRACTICE.

MR. GOODMAN, the unqualified assistant of Mr. Kempster, of Battersea, was a few days ago the defendant in an action for unskilful treatment of one Mrs. Pike, the wife of a journeyman baker. Mrs. Pike seems to have suffered dangerously from vomiting in pregnancy. She sent for Mr. Goodman, who had agreed to attend her in confinement. Mr. Goodman prescribed brandy and soda-water for the vomiting, and at each visit, notwithstanding the continuance of the symptoms, repeated his prescription, and declared that he could do no more until labour pains began. The patient getting worse, the nurse fetched Dr. Lester (?), who called Dr. John Brown into consultation. They agreed that the only chance of saving the patient's life was by the induction of premature labour. This was done. Five-drop doses of prussic acid were prescribed, according to Churchill's text-book; and the patient recovered. At the trial both these gentlemen strongly condemned the treatment by soda-water and brandy. In our opinion they exceeded the bounds of moderation in this condemnation, notwithstanding Churchill's text-book. Mr. Goodman's fault was in practising midwifery on a large scale without a qualification, &c., and in having only one remedy. The Judge condemned the defendant in £5 damages and costs, considering that there had not been the usual attendance and watchfulness.

It is a serious illustration of the extent to which men with no qualification practise the most important parts of the medical art, under cover of men who hold qualifications. The principal part of Mr. Goodman's defence was that he had attended 1800 cases. It is to be noted that Mr. Goodman himself undertook to attend the patient for fifteen shillings. It is a curious discovery, which we are just beginning to make, that the largest amount of illegal practice is done under the protection of legal practitioners. And in any future Medical Act this evil should be remedied.

THE VACCINATION ACT AT LEEDS.

THE Report of the Leeds vaccination inspector for the quarter ended June 30th last, shows that out of 407 children born in the township during the last three months of 1869, and unvaccinated on April 1st, 51 died before the vaccinal

period, 22 had their vaccination postponed through sickness, 27 had been removed from the township, and in only one case was it necessary to call into operation the penal clauses of the Act. Fourteen persons died of small-pox in the township during the last twelve months; and of these six were brought into the House of Recovery from neighbouring unions.

The inspector considers that "the unanimous desire of the medical profession to encourage vaccination in the township is operating most beneficially," as it has strengthened the feeling of the inhabitants to comply with the requirements of the law. The recusant against whom proceedings have been taken appears to have been lately a candidate for the office of guardian—an unsuccessful one, we gather,—and has published a pamphlet against vaccination. His arguments did not seem to have much weight with the magistrate, who fined him twenty shillings and costs for neglecting to obey the law.

WATER-SUPPLY AT GREAT MALVERN.

WE have always laboured under the impression that Great Malvern derives its chief celebrity from the purity and abundance of its water-supply. This idea, however, would seem to have been founded on a false assumption. Several letters have been recently addressed to the authorities, complaining of the short supply. One gentleman states that his cistern is empty, and his well dry, and that he has had fewer gallons of water for his money lately than the water-rate would have found him in beer; which we suppose could only happen if there were no supply at all. Another says that he had had no supply for a fortnight, and that this had occurred for five or six weeks every summer. One reverend member of the local board proposes to go to Parliament for power to sell by metre, and his proposition seems to have been endorsed by the Chairman. Unfortunately the board is pledged not to increase the rates. A Mr. Archer was of a more practical turn of mind. He was for attending to the recommendations of the surveyor, who had paid great attention to the subject, and who said that there was an abundance of water, but insufficient storage. Let the inhabitants of Malvern look to it. We hear that there have been fatal cases of diphtheria and fever, and we would warn them that it is easier to destroy than to build up a sanitary reputation, and particularly of a town to which so many resort for the restoration of their health.

A MEDICAL GUARDIAN.

WE are in the habit of attributing all the wrong and shabby things that are done by boards of guardians to the small tradesmen who administer the poor-rate. It would seem that we are not always right in doing this. Mr. Harvey, the medical chairman of the Islington Board of Guardians, the other day distinguished himself by objecting to an item in the drug bill for distilled water. He suggested that the dispenser might put the kettle on and distil it for himself. We presume that both the kettle and the dispenser have something else to do than to distil water. The cost of two gallons of this very indispensable article is, we presume, about sixpence. We will do Mr. Harvey the justice to suppose that he knows that many of the drugs of the Islington paupers would be rendered worthless if compounded with ordinary water. Yet he misled the members of the board by his objection. He produced such a sensation by the demur he made that he finally did what he at first thought he could not do—put his pen through the item, and saved the good people of Islington sixpence. Of course henceforth distilled water will not be used. Very valuable drugs, like nitrate of silver, will be wasted. The diseases of the poor will not be cured, and the poor will go on getting three and four shillings a week as sick paupers. But what of that if three or four times a year Mr. Harvey astonishes and delights his colleagues by saving the parish sixpence, and showing his wit by suggesting that the dispenser should stop dispensing, send for the kettle, and distil water.

THE GOVERNMENT AND FUTURE LEGISLATION.

THE Government has not recovered from its disappointment at the failure of its Medical Bill, and Mr. Forster cannot undertake to say that they will be able to give the same labour next year which has been "fruitlessly" bestowed on the subject this year. It will be the Government's own fault if it bestows any more fruitless labour on the subject. All it has to do is to alter the constitution of the Medical Council, and re-insert Clause 18. If the Government does this the difficulty is as good as removed. If it does not, the matter will be taken up by private members. But the Government should understand that it alone is now responsible for the present unsatisfactory state of the examining system by which students are passed into the medical profession.

SICKNESS AND MORTALITY OF THE CITY OF LONDON POLICE.

THE annual report of Mr. Borlase Childs, F.R.C.S., showing the sickness and mortality of the City police, has just been presented for the year ending June, 1870. The average strength of the force was 698 men; of whom 180 are unmarried. The latter are more prone to sickness, in the proportion of 602 to 440 per 1000 men; but the mortality is less. Men on night duty are less healthy than those on day duty, in the proportion of 584 to 431 per 1000. Three hundred and forty men were admitted to hospital in the course of the year; and six died. The average duration of each illness was 11·45 days.

Compared with the metropolitan police and the army, these statistics are extremely favourable; and Mr. Childs attributes this—first, to the treatment of the men in hospital instead of homes, in which his directions were rarely carried out; secondly, to close medical supervision; and, lastly, to a healthy recruitment of the force.

Catarrh and rheumatism are the prevailing disorders of the force. One hundred and forty-eight candidates for admission were examined, whose average age was twenty-four years, and height 5 ft. 9¼ in.; 47 were rejected. Although the number of rejections is proportionately less than in the army, it is high considering the age and character of the men. It is not encouraging to think that the majority were rejected on account of muscular tenuity and varicose veins. In the course of the year eight men left the force on account of ill-health; and three were discharged on pension.

A CONVALESCENT HOSPITAL FOR DISEASES OF THE CHEST.

AT a recent Court of the Governors of the Hospital at Brompton for Consumption and Diseases of the Chest, it was resolved that a plan should be prepared for the establishment of a sanatorium, on a site of not more than ten acres of land, within a radius of ten miles of the parent building. There are few forms of charity more valuable than the convalescent hospital, or to which we can more heartily wish success. Even in general hospitals it is pitiable to see the patients about to be discharged, who can obviously no longer be suffered to occupy beds to the exclusion of acute diseases or recent accidents, but who are

still unfit for work, and who will too often return to homes that are calculated only to aggravate their partially cured maladies. To the consumptive, or to the convalescent from inflammatory chest disease, all this applies with double force, and the projected sanatorium will practically operate as an enlargement of the Brompton Hospital; completing its work, while leaving its beds free for the reception of more urgent cases. We trust the governors will be able to carry out their good design on a scale commensurate with the requirements of the original institution.

A WARNING.

THE Secretary of State for Foreign Affairs has received notice this week that cholera is now epidemic at Taganrog, and that, in consequence, vessels coming from the Sea of Azoff must undergo quarantine at ports in the Black Sea and other places. A case of cholera has also occurred in Constantinople, the subject thereof being a passenger just arrived from Odessa. The weekly report of the Registrar-General shows that a large number of cases of diarrhœa have recently proved fatal, and he records a warning that was reiterated over and over again most emphatically during the last epidemic of cholera in England, to the effect that neglected diarrhœa may drift into cholera. We owe a duty to the public in endeavouring at this season to implant this conviction firmly in their minds, for it was this conviction, and the consequent action taken upon it, that, in the outbreak of 1866, saved many lives. If we cannot cure the disease, we can do much to prevent it; and so we say to the profession, Warn and watch; and to the public, Seek safety early, and ye will secure it easily.

SIR JOHN THWAITES.

THE first chairman of the Metropolitan Board of Works has survived but a few days the "crowning of the edifice" of that great public work the Thames Embankment, which was conceived and executed under his auspices. Eminently a shrewd, practical, thoroughly business-like man, Sir John Thwaites has filled his by no means enviable post with credit to himself and advantage to the inhabitants of the metropolis. We know something of what parish vestrymen are now; that fifteen years ago even their chosen representatives at the Metropolitan Board were anything but tractable we may be quite sure. It was the business of the chairman to "lick into shape" the rough elements with which he was surrounded, to moderate asperities, and to bring order out of confusion. A comparison of the reports of the proceedings at the Board in later periods with those of its earlier history will show how gradually the chairman's authority came to be recognised and respected. The position was an arduous one, and Sir John Thwaites proved himself fully capable of filling it. We trust that a successor equally deserving of public confidence will be found.

LIVERPOOL AND ITS HEALTH OFFICER.

THE Town Council have rejected by 18 votes to 16 on a division the Report of the Health Committee which proposed to put a check upon the medical officer of health in regard to the conversion of cesspools into waterclosets. This has led to the resignation, by Mr. Alderman Dover, of the chairmanship of the Health Committee, that gentleman having apparently been led by strong economic tendencies to oppose the principle on which Dr. Trench has acted, as leading to unnecessary expenditure. It is, of course, matter for regret that the Council should lose the valuable services of so able and energetic a man as the worthy Alderman; but we are quite sure that they have done wisely in supporting their medical officer of health, who cannot possibly desire to put his fellow-townsmen to needless expense. Whoever has studied the proceedings of Dr. Trench since he has been health officer for Liverpool must have been led to the conclusion that his policy throughout has been based on the soundest principles of economy.

SANITARY STATE OF CHESTERFIELD.

A MEMORIAL has been presented to the Town Council of Chesterfield calling their attention to the extremely offensive and dangerous state of the river Rother, into which is poured the sewage of the town. The memorial was signed by nearly the whole of the medical men, clergy, magistrates, and leading tradesmen; and it was stated by Dr. Busby that the filthy black water in the river contained four parts of organic matter in every thousand, and that not even a frog could live in it. Since the 1st July there have been thirty cases of diarrhœa, one of British cholera, and several cases of fever amongst the out-patients of the Chesterfield Hospital, and it is quite probable that an epidemic may break out at any moment.

The members of the corporation do not appear to entertain very clear notions as to what is necessary. One member proposed to recur to the system of privies; another regretted the failure of the A. B. C. process; some one wanted to await the result of the inquiry by the British Association Committee, to which five guineas had been paid. The only practical suggestion was negatived—namely, to consult an engineer. Unless something be done, however, an application will be made to the Home Secretary, who may, perhaps, be able to quicken their movements. There is, in fact, enough of evidence. Every hundred tons of sewage will produce, by proper irrigation, ten tons of grass, and every ten tons of grass will produce one ton of milk. Perhaps it will not be beyond the capacity of a Chesterfield town councillor to calculate the value of the sewage from the experience of his own household.

THE TWENTY-FIRST REGIMENT.

ACCORDING to the latest intelligence, a manifest improvement has been apparent in the state of health of the men of this corps since its arrival at Bangalore. It will, however, take some time for them to shake off the effects of malaria; and relapses of fever are still of frequent occurrence. The sick list, consequently, still continues higher than normal. A few cases of enteric fever have likewise occurred. The regiment has been struck off all night duty, and everything is being done to promote the comfort and wellbeing of the men.

THE HOME SECRETARY.

THE public should be much obliged to Mr. Bowring for eliciting from the Home Secretary what really amounts to a confession of incapacity to grapple successfully with the responsibilities of his high office. Out of a long list of measures enumerated, Mr. Bruce has not hitherto been able to connect his name with legislation accomplished in a single instance. He has failed two sessions following to carry through a Mines Regulation Bill; while, with the better government of London, the reform of our sanitary laws, the water-supply of towns, the pollution of rivers, &c., he has not even attempted to deal. And even in the next session he only promises to make "a selection" from these for legislation, so that when the whole of the important subjects embraced will be disposed of it is hard to conjecture. We hold that the activity displayed by Mr. Bruce's colleagues in the session just closed in no wise justified his own inaction.

EPSOM COLLEGE.

THE Council have elected the Rev. Dr. West (D.D.), of St. John's College, Oxford, as Head Master of Epsom College, an appointment which will, we feel sure, give universal satisfaction. Dr. West, who is one of the Vice-presidents of the College of Preceptors, took a second class in Classics, and a first in Mathematics, at Oxford. Since January, 1852, he has been Head Master of the Brentwood School, and has there gained considerable experience in conducting successfully the working of a new scheme sanctioned by the Court of Chancery. We are glad to hear that a complete understanding exists between the Council and Dr. West as to the necessity for instituting certain reforms in the administration of the College affairs, and such as will ere long enable us, we hope, to report that the College is entering upon a better and a more prosperous career.

CHOLERA ON THE EAST COAST OF AFRICA.

INTELLIGENCE has been received up to the 20th May last. On the 30th April H.M.S. *Cossack* was at Zanzibar from Seychelles. The operations of the squadron for the suppression of the slave trade on the East Coast of Africa had to be abandoned, as unsafe to the crew of the fleet, on account of the prevalence of cholera. A German vessel that had proceeded to sea from the Zanzibar coast had to put back with its crew disabled from the effects of cholera. At the latest dates there were very few cases of the disease remaining, and the epidemic was considered over. After apparent subsidence, however, cholera had on more than one occasion broken out afresh. The estimates of its ravages are said to have fallen far short of the truth—as many as ten or fifteen thousand persons having perished, amounting in one locality to about one-fifth of the population.

SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

A QUARTERLY COURT of the Directors of the above Society was held on the 13th ult., the president, Dr. Burrows, in the chair. Fresh applications for relief were received from two widows and four children, and grants were made to them in accordance with the necessities of the applicants. There are now fifty-eight widows and fifty-six children receiving assistance from the Society. The sum of the grants for the half year amounted to £1406, being an increase of £26 on the amount voted last half year.

VACCINATION IN BRITISH INDIA.

THE operations of the vaccine department in the presidencies and provinces of British India appear to be very energetic and very successful. It appears, by the statistical abstract just published, that during the year 1868, 1,753,479 persons were vaccinated in India; 1,557,873 being successful, and 195,606 unsuccessful cases. There has been a large progressive increase in the work since 1859, when a total of 844,878 cases only were recorded.

FEVER IN LIVERPOOL.

THE authorities are not a little puzzled to find accommodation for the increasing number of fever cases. The governor of the workhouse reported that he had 370 cases in the house, 96 having been admitted in the preceding three days. The vestry has determined, at a special meeting, that the infant department of the Industrial Schools shall be used as a temporary fever hospital, and the vestry clerk has been instructed to ascertain whether the War Office would be willing to grant the use of hospital tents in case the fever spreads more extensively, and further accommodation be required. It seems strange that a town like Liverpool should be reduced to such shifts for the accommodation of a class of cases which are so inevitably created by its own peculiar conditions, social and physical. Liverpool should have tents of its own, ready for emergencies such as the present.

REMOVAL OF PATIENTS TO THE FEVER HOSPITAL.

THE guardians of St. Pancras have given instructions that the order for removing patients to the Fever Hospital shall be accompanied by one for the parish ambulance carriage, which is in charge of the master of the workhouse. If this simple arrangement will secure the proper removal of the patients, we may be permitted to inquire why it should not be made compulsory on all relieving officers by an order of the Poor-law Board.

THE examination of candidates for the Naval Medical Service has been taking place at the London University during the present week. We understand that the number presenting themselves for examination has been insufficient for the requirements of the service.

THE death-rates of some of our large cities and towns have been very high lately in consequence of the prevalence of diarrhœa. The diarrhœal mortality during the last three weeks has been equivalent to an annual rate of 10 per 1000 persons living, in Sheffield, Leicester, Salford, and Leeds, the rate in London having been 6 per 1000.

THE Medical Officer to the Privy Council having pointed out to the Wigan Town Council that without a health officer they could not expect to execute their sanitary duties successfully, the Council have elected Mr. W. C. Barnish, M.R.C.S., of Wigan, to fill the post.

ACCORDING to the latest accounts, small-pox had been prevailing at Halifax, as many as between 40 and 50 cases having been at one time under treatment in hospital. The disease was, however, believed to be subsiding; and the cases were generally mild, the confluent form having been almost exclusively confined to the unvaccinated persons attacked by it. It is supposed by some that the disorder was imported from Boston, and by others that it was introduced by passengers from a steamer, with a small-pox patient on board, putting-in to coal.

AMONG the trials that have been made with the new remedy, hydrate of chloral, we perceive that it has been recommended in the treatment of cerebro-spinal meningitis, Dr. A. Paton, of Vincennes, having obtained a successful result by its aid in four cases of that disease.

SIR DOMINIC CORRIGAN has issued his address as a candidate to represent Dublin at the coming election.

MEDICAL REFORM.

WE purpose shortly to place before the profession the draft of a Bill for the accomplishment of the necessary measure of Medical Reform. The question is one which the profession will have to decide, and we feel assured that if we can only secure its approval of a scheme, its passage through Parliament will be triumphantly secured.

REPORT
OF THE
THIRTY-EIGHTH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

Held in Newcastle-on-Tyne, July 9th, 10th, 11th, and 12th.

NEWCASTLE has this year, and during the past week, been the scene of the thirty-eighth annual meeting of the British Medical Association. It had been surmised that the great distance from the metropolis, which ordinarily supplies so many members to these gatherings, would have led to a smaller meeting than usual; but the attractions of the old town, rich in so many historical associations, together with the increasing appreciation on the part of the members of the value of these meetings in effecting an interchange of knowledge, and, lastly, perhaps the free system of railway communication with all parts of England, and the propitious weather, have happily falsified these predictions; and no better evidence of the full attendance on this occasion can be adduced than the fact that, within four hours after the lists had been opened, 100 members had entered their names. And, indeed, the ancient town (or rather county, since it has its own lord-lieutenant, sheriff, and magistrates) proved well worthy of a visit. With a population (including Gateshead) of upwards of 150,000, it presents in its newer parts wide, airy, and well-built streets, that yield the palm to those of no provincial town; and though these are backed by wynds or chares that rival, if they do not surpass in their squalor and dirt, the worst parts of Glasgow or London, it must be remembered that it is essentially a manufacturing town, and that in a few years the parts in the vicinity of the quays at least will be swept away for a superior class of buildings. Originally probably a British fastness, it was at once seized by the conquering Roman for its military advantages, and constituted the Eastern extremity of the wall of Hadrian. Held successively by Saxon and Dane, Norman and Scot, its name crops up in aftertime in historic association with William the Conqueror, William the Lion, and William Wallace, with Cromwell and Charles I. Its crowning glory, however, is its connexion with the Stephensons, who, making this the centre for the manufacture of their locomotives, have added enormously to its wealth, population, and importance, so that it may now fairly be regarded as one of the most thriving and active of our northern cities.

The arrangements for the reception of the visitors were extremely satisfactory, a room in the Town-hall having been opened for the issue of tickets to members for the supply of lists and prices of lodgings and other information. The local secretaries, Drs. Philipson, Arnison, Nesham, Banning, and Mr. Armstrong, deserve credit for their activity and kindness in obtaining lodgings and giving general assistance to strangers.

The rooms provided for the Council, as well as those for the several sections, were spacious and comfortable, the places of meeting being as follows:—*Medicine*, Lecture-room of College of Medicine, Neville-street; *Surgery*, Lecture-room of Literary and Philosophical Society, Westgate-street; *Physiology*, Board-room of Savings Bank, Westgate-street; *Midwifery*, Board-room of Gas Company, Neville-street; *Public Medicine*, Council Chamber, New Town Hall; whilst *Psychology*, which formed a new and interesting section, met in the Committee-room of Council Chamber.

The first general meeting took place at 8 P.M. in the Lecture-room of the Literary and Philosophical Society—a society, we may say in passing, that was one of the earliest founded in this country. There were between two and three hundred members present, and the meeting was honoured with the presence of the mayor and sheriff, Mrs. Charlton and friends, with two Indians.

The retiring President (Dr. CHADWICK), in opening the proceedings of the present meeting, referred to the powerful influence exercised by the Association in causing the withdrawal of the Medical Acts Amendment Bill. He reminded them that they thereby incurred a serious responsibility, and that it would be their duty to continue their efforts in the same direction. The limited action of the Association, in confining its attention to the single subject of direct representation, had been a mistake, and unworthy of it, and in future a more comprehensive view must be taken. He paid a well-merited compliment to the labours of Dr. Waters, Chairman of the Committee, and contended that he must again occupy the same position. He referred generally to the power of the Association to promote professional advancement, and dwelt upon the importance of the appointment of Editor, and claimed the support of the members on his behalf. He did not inquire how it had arisen, but sure it was that much disappointment had been experienced on all hands by the apathetic attitude of the *Journal* in the recent reform struggle. He paid a passing tribute of respect to the memory of those associates removed by death during the past year. He introduced his successor to the meeting, and indicated in strong terms the high estimation in which he held the dignity he had enjoyed.

INAUGURAL ADDRESS.

Dr. EDWARD CHARLTON, Physician to the Newcastle Infirmary, having taken the chair as President, delivered his address. After welcoming the Association on behalf of the medical profession in the northern counties, and complimenting it on its growth in numbers and influence, Dr. Charlton gave an admirable sketch of Newcastle, its historic features, its trade, the objects of interest which it affords to visitors, its sanitary condition, its iron and lead manufactures, and the diseases peculiarly rife amongst those who engage in these latter. He continued:—

"Let us now turn to the immediate business of the Association; and it must be confessed that there is work enough for us to do. We firmly believe that no more fortunate change was ever made than when the 'Provincial' was altered to the 'British Medical Association.' It was then that for the first time our interests became thoroughly identified with those of the profession in the great capital city of this country. We have since then worked in full harmony with our London brethren, no longer receiving them as visitors, but welcoming them as *bonâ fide* members of the Association. It seems to us that most of the great modern reforms in our profession have been subsequent to this change of name, to this amalgamation of provincial and metropolitan interests. Although the deficiencies of the profession, and its lamentable condition, had long before been discussed in our journals, and been depicted, often in language sharp and cutting as that of Junius in the last century, still it is only within the last two decades that the whole profession, tired of calling upon Jupiter, has unanimously put shoulder to the wheel, and moved with one accord to remedy our wrongs. United by its able *Journal*, united still more by the cordiality engendered by their annual meetings, the British Medical Association has pushed forward in the path of medical reform, year by year overthrowing obstacles that at first sight seemed insurmountable, and bearing ever in view the improvement of medical education, and the general regulation of the profession. And now that final struggle for a good standard of medical education is fairly before us. Hitherto one great and paramount obstacle to progress was the multiplicity of sources whence licences to practise medicine could be derived. No uniform standard of examination could be kept up; the well-meant endeavours of the Medical Council by sending out visitors of examinations gave no guarantee for permanent improvement; and universities and corporations were ever competing for licentiates, ever exposed to the deadly temptation to lower their standard of examination to attract more graduates. Against this crying evil there was but one remedy—a single portal, by which all should enter the profession; a single but searching examination for the licence to practise. Much as we longed for this great change, it seemed, as yet, far from our grasp; when, in February of this year, the gratifying announcement was made that the very object which we sought was to be a Government question, and that a Bill, brought forward by Earl De Grey as a member of the Government, embodied in its provisions the great condition of a single portal whereby all must enter the medical profession. It was a novel thing, indeed, but a most acceptable fact, that a measure of such vast importance should be proposed by the Government even

before it was openly moved for in Parliament by the profession. It was a happy augury of success—a sign that the Government of this country was at last becoming fully alive to the necessity of medical reform, of which the formation of the Medical Council in 1858 was the first instalment.

"There was reason however to fear, from the sweeping nature of the Government Bill, and the magnitude of the changes which it proposed to effect, that great opposition would be made to its progress by those most interested in retaining matters in their former unsatisfactory condition. On the whole, however, the Government measure was at first warmly welcomed by the medical practitioners of this country. Soon afterwards rumours arose that certain amendments were to be introduced by the framer of the Bill, alterations which might be fairly regarded as promoted by those bodies whose position, and perhaps whose very existence, was more or less threatened by the provisions of the original Bill. The universities and corporations were to retain the power of granting medical degrees to others than to those who had passed through the single portal insisted upon in the original measure. It was alleged that these were to be only honorary degrees, and that they would not confer any licence to practise; nay, that the entering into practice was to be forbidden under heavy penalties to such graduates, unless they likewise passed the one necessary examination. The enforcement of penalties for illegal practice has always been a matter of extreme difficulty, even in cases where the individual had no qualification whatsoever; but the difficulty would be increased tenfold when the offender appears before the public armed with a university degree. This modification of the eighteenth clause of the original Bill we can only regard as likely to produce the most disastrous effects. The single gate with triple doors, through which all were bound by the eighteenth clause of the original Bill to pass, becomes no longer an efficacious barrier—it is only another addition to the nineteen universities and corporations empowered to grant licences and degrees. On the other hand, if sufficient guarantees could be obtained that those to whom such honorary degrees might be accorded would not, and could not, practise without having undergone the examination for the licence, it does not seem to us so very unreasonable that the universities and corporations should be enabled to grant such honorary degrees. But without such guarantee this concession will be unquestionably dangerous, and must be energetically resisted.

"The direct representation of the profession in the Medical Council is the other point strongly insisted upon by this Association. The great change effected by the single licence system, if adopted, seems to us unquestionably to introduce this second measure. While the universities and corporations were the sole sources of our medical qualifications, it was, perhaps, not unnatural that their representatives alone, or in great part, should constitute the Medical Council; but now, when a new licensing body is to be formed, independent altogether of all pre-existing ones, the only one, too, through which professional practice can legally be commenced, it seems to follow as a matter of course that the practitioners admitted under this new provision are entitled to full and direct representation in the Council. As to the means by which this great change is to be accomplished, we shall not attempt here to describe them. We leave the accomplishing of these measures to abler and more practised hands; suffice it to say that we deprecate any increase in the already unwieldy and most costly dimensions of the Medical Council. We believe that without much difficulty certain representatives may be eliminated, some others may be amalgamated, so as to admit of four members elected by the profession from England, two from Scotland, and two from Ireland; all direct representatives of the great mass of medical practitioners. Unless this be conceded, we feel sure that the medical profession will remain dissatisfied with what is otherwise a most useful measure.

"By the postponement of the Bill we have now time allowed to us to recruit our strength and consolidate our forces for the ensuing campaign. The struggle may be a sharp one, as it ever is when vested interests are attacked; but the British Medical Association will be supported by the great mass of practitioners throughout the country. It is now impossible to recede; the necessity of a single examination has been acknowledged by all parties. No fresh Medical Bill will be accepted which does not contain this provision, unfettered, too, by the so-called amendments that were proposed when the last Bill was in the House of Lords. And once that such a measure is carried, the direct representation of the profession in the Medical Council should follow as a legitimate consequence. These two cardinal points should, indeed, be embodied in one and the same Bill. Our next Parliamentary session will be one of all-absorbing interest to the medical practitioner; for when the Government has, on the petitions sent in and the influence legitimately employed, declined to proceed with the recent measure, it has for the first time acknowledged the existence of an interest and of a power external to the Medical Council. That interest, that power, it will be the province of the British Medical Association to improve and consolidate. While we fully recognise the merits of the Medical Council, we are not blind to its faulty construction, which will become still more glaring when the position of the universities and corporations, as now the sole licensing bodies, shall have been totally altered by the proposed measures."

Dr. Charlton concluded by observing that when the question of medical reform shall have been settled, the Association would have little leisure to rest upon its oars. There are other matters of a sanitary kind especially demanding attention, and the Association must be doing its part towards the necessary reforms in hospital management, and the prevention of venereal diseases by special legislation; and he hoped that when, in after years, they perused the records of what was done at Newcastle, they would return a verdict that the Association at Newcastle did its best towards the object, according to the light they were permitted to enjoy.

Professor STOKES, who was loudly applauded on rising, then proposed a resolution to the effect—"That the cordial thanks of the meeting should be given to Dr. Chadwick for his valuable services during the past year, and that he be elected one of the permanent vice-presidents of the Association." The proposal, he felt quite certain, would be adopted by acclamation. He would hardly be doing justice to his own feelings, or justice to that great meeting, if he were to sit down after the simple announcement of such a resolution. It was a source of satisfaction to assure the Medical Association that, as a member of the Medical Council, he was one of the supporters of the Bill that had been rejected, and a supporter of those parts of the Bill which he believed the Medical Council here altogether approved—namely, that of central examinations. With respect to Clause 18, he declared that he voted in the Medical Council for its modification, and not for its omission. But although he had done so, they would perhaps permit him to say that they should be cautious how far they were right in believing that the mere examinations would carry out the ends which the President had so properly enunciated in his address. And then there was another point which he thought very important. It was the great desire that had been manifested for uniformity; but how could they have uniformity? God Almighty had not made us uniform. (Applause and laughter.) Could they put every foot into one shoe? (Renewed laughter.) It was simply a dream to think that uniformity could be obtained. (Cries of "No, no," "Quite right," and great uproar.) They could not have uniformity, and therefore all authorised medical education founded upon an assumed uniformity must be utterly fallacious. He thought that the duty of the Association—and he felt he was speaking greatly against the feeling of the audience—should have been to have taken the Bill as an instalment, and the main question of direct representation could have been dealt with afterwards.

Dr. PAGET seconded the resolution, and, in doing so, remarked that he need scarcely say a single word of praise with respect to Dr. Chadwick, as they all knew the nature of the services that that gentleman had rendered, and how active and zealous he had been in performing his duties during the whole of the year. They knew also that he had most actively represented the views and wishes of the Association, so far as to actually be one of those who, as leaders of the Association, had assisted to throw out the Government Bill. Now, he for one believed that the Bill contained so much that was good that it was a great misfortune to have lost it. ("No, no"; hear, hear, and cheers.)

Although he fully sympathised in the desire which the Association had for extended representation in the Medical Council, and agreed with much that had fallen from the lips of Professor Stokes concerning it, he must say that he did not think, and, indeed, never did think, that the particular plan brought forward by those who directed the influences of the Association was the best one. (Hear, hear, disapprobation, and applause.) The Medical Council could very well regulate the system of examinations, and see that it was adhered to when they were present; but, as they could not always be present to see things conducted satisfactorily, men might be passed who were not fit for the labours likely to devolve upon them, and in whose hands loss of life and great suffering were much too frequent. Such a state of things, at least, would have been remedied by the Medical Bill.

Mr. HUSBAND (York) here called the speaker to order, as he was dealing with subjects that had no right to be brought forward at a business meeting.

Dr. PAGET concluded his remarks with a tribute to the energy and zeal of their late president.

The vote was very cordially awarded by the meeting.

Dr. CHADWICK, in replying, said he cared not how often he was told that the Bill was a perfect Bill, because the Association had pronounced it imperfect.

The Secretary read the Report of the Council, which congratulated the members on the prosperity of the Association, and explained that a section devoted to Psychological Medicine had been established at the annual meetings; that there were 4258 members now on the books; that Mr. Hutchinson had resigned the editorship of the *Journal*, and Mr. Hart had been appointed his successor; and referred to other business matters. Bearing testimony to the activity of Dr. Waters in the matter of Medical Reform, the Council suggested that the Direct Representation Committee should be merged in a Medical Reform Committee, which should have more extended powers, and be enabled more effectively to contend for the adoption of the principles advocated by the Association in view of next session's legislation on the subject. The treasurer's account for 1869 showed that the receipts were:—From subscriptions, £3471 12*s.*; advertisements and sales, £1842 13*s.* 10*d.*; total, £5314 5*s.* 10*d.*; balance in the treasurer's hands (1868) £201 0*s.* 9*d.*, or a grand total of £5515 6*s.* 7*d.* The expenditure was:—For the *Journal*, £4961 15*s.* 10*d.*; executive expenses, £525 2*s.* 10*d.*; scientific and other grants, £15; total, £5501 18*s.* 8*d.*; leaving a balance in the treasurer's hands of £13 7*s.* 11*d.*

Dr. BEATTIE, of Dublin, proposed that the report of the Committee should be received and adopted.

Mr. HECKSTALL SMITH, in seconding it, stated that he had hoped the members of the Association would assert their right to constitute themselves the representatives of the profession. He had exerted himself to get the Bill rejected, and his great objection to it was that it was framed by the Council, by the very men representing the bodies that required reform.

Dr. CHADWICK proposed that Mr. Williams should be reappointed Secretary. He alluded to the arduous duties of the post, and the qualifications for it possessed by the present holder.

Dr. HUSBAND seconded the proposition.

The Rev. Dr. BELL stated that he was antagonistic to the Committee of Council, that they were a secret and irresponsible body, and an *imperium in imperio*. He proposed Mr. Williams's salary should be reduced to £250.

The motion was, however, not seconded, and consequently fell to the ground, and the first motion was carried unanimously.

Mr. CLAYTON observed that the Committee had carefully examined the finances of the Association last year at Leeds, and that it was thought better to give Mr. Williams a fixed rather than a fluctuating salary, and that in fixing it at £300 it had been a direct loss to him that year of £100.

Mr. WILLIAMS returned thanks, and said he should do his best to deserve the £300.

Dr. BARNES proposed Drs. Church and Potts again for auditors, and Dr. WALLER LEWIS seconded it.

The Rev. Dr. Bell then rose to propose the motion already printed, and before the meeting. Much irregular discussion followed, and a direct negative to it was proposed by Mr. Blackett, seconded by Mr. Banning, of Gateshead, and carried by a large majority.

Dr. ELLIOTT, of Carlisle, proposed that a volume of Transactions should be published.

Dr. HILL, of Belfast, seconded the motion.

Dr. SIBSON thought the funds were insufficient to feed two works, and that a bad *Journal*, and a weakly body of Transactions would be a mistake; but he thought such a volume might be occasionally published.

Dr. FALCONER remarked that the *Journal* was delivered free of cost, and he thought it would be impossible to increase the subscription, as they had already to pay an extra sum for the expenses of the branches, and each year they were five, six, or seven hundred pounds in arrears. It was not impossible that this year it might be £1000. Ultimately Dr. Elliott withdrew his proposition.

The meeting then separated.

The Sheriff of Newcastle had invited the Association to breakfast in the new Town Hall, on Wednesday, at 8.30, which invitation was largely accepted. At the meeting of the Council at 9.30, it was determined that the place of meeting of the Association for next year should be Plymouth, a choice subsequently ratified by the Association. The president elect is Mr. Whipple, of Plymouth. At twelve o'clock between two and three hundred members assembled to hear the Address on Medicine by Dr. Sibson, which will be found in another part of the journal. In the evening a large party, numbering at least 250, met in the banqueting hall of Sir William Armstrong, in Jesmond Dean, where a most sumptuous entertainment was prepared for them. The usual loyal toasts were proposed, and Sir William Armstrong then expressed the gratification he experienced in fulfilling the duty he felt he, as a successful citizen of Newcastle, owed to all scientific gatherings in that town. Dr. Charlton responded for the Association, and trusted that members from distant parts would find that in the cold regions of the north there was no lack of warmth in the hospitality that was offered. Sir William Armstrong's health was drunk with loud acclamation. In the evening the President's *soirée*, which was very fully attended, was held in the Town Hall.

The following papers were read in the various sections:—

Dr. EMBLETON read a paper "On the Shoulder-tip Pain, and other Sympathetic Pains, in Diseases of the Liver." The author attempted to give a fresh explanation of these pains. It occurs where the external division of the spinal accessory nerve enters the edge of the trapezius, and in cases in which there is evident, not latent, inflammatory mischief going on in the liver or its ducts. The nerves become inflamed and painful, and that state is propagated to the trunk, branches, and origin—e. g., of the par vagum,—causing disturbance in the various organs supplied by it. The spinal accessory is intimately connected with the par vagum, and receives the morbid influence, which manifests itself at the top of the shoulder in pain; as a diseased hip causes pain in the knee. The sympathy consists in an extension of an inflammatory state from the diseased to the pained part. One effect of this pain is to paralyse more or less the sterno-cleido-mastoid and trapezius muscles, and thus to limit the respiratory movements, and keep the liver quiet.

Mr. HOVELL (of Clapton) read a paper on "Paralysis with reference to Treatment," wherein it was stated that, although paralysis was generally referred to the brain and medulla, the vaso-motory system claimed an independent as well as an associated consideration. It was proposed to refer paralysis also to three classes: to causes affecting—1st, the generating power of nerve-structure; 2nd, the conducting power of nerve-fibre, of which irritation formed a second division; and 3rd, paralysis from waste. Paresis or neurosis might be regarded simply as depression or exhaustion of nerve-power, not identical with paralysis, but predisposing to it. The sympathetic was, first, the seat of shock, either physical or moral; secondly, a vaso-motory power affecting the supply of blood to nerve-centres; and, thirdly, a regulator-secretion, by its supply to nerve-cells, by the fibres of Remak. (Dr. Meryon.) An apoplectic clot might operate by interfering with generating power (Class 1), or as a cause of irritation interfering with conduction (Class 2). Reflex paralysis was a compound form indicating neurosis or exhaustion of power (Class 3), acted on

by some cause of irritation (Class 2). Successful treatment must remove irritation as well as raise power. By directing remedies to the classification of respective causes, treatment might be made more successful as well as satisfactory.

Dr. A. ERNEST SANSOM read a paper "On the Sulpho-carbolates, and the Antiseptic Method in Medicine." The author alluded to the difference of opinion with regard to what is termed the "germ theory" of disease. He thought that much of the diversity depended on the connotation of the word "germ." There is abundant evidence that the "contagia" of transmissible disease are material and organic; they bear a strong analogy to ferments in their mode of operation; whatever the initial cause of each, the existence of organised material possessed of reproductive powers is intimately bound up with both processes. The author alluded to the recent researches of Chauveau on vaccine, glanders, and sheep-pox, as showing that the activity of the "contagia" depended on the solid particles proved by Beale to be actively-moving masses of bioplasm. He considered that the efficacy of disinfectant and antiseptic measures was due to no obvious chemical influence, but to the poisoning of those septic organisms which are intermediary agents of decomposition between organic and inorganic matter. He thought that the proliferation of contagia (bioplasm) might be checked within the living body, and discussed Polli's treatment by the sulphites. From the well-known properties of carbolic acid he hoped more from the sulpho-carbolates, of which he gave a succinct description. (1) The *alkaline sulpho-carbolates*. There was evidence of great success from the administration of the sodium salt in throat ulcerations and in scarlatina. There was promise of success in variola. In enteric fever, Dr. Ligertwood, of Newbury, considered the treatment to be efficacious. (2) *Sulpho-carbolates of alkaline-earth metals*. Of these the most interesting is the calcium salt, of extraordinary solubility, which the author had employed in cases of rickets with remarkable success. (3) *Sulpho-carbolates of the metals*. The zinc and copper salts had been used by surgeons, especially by Mr. John Wood, as antiseptic dressings for wounds, and a very favourable opinion of them had been given. The author had employed the iron salt internally, with varying success; he was doubtful whether it had any advantage over other salts of iron. In conclusion, he hoped that the remedies would be tried upon their merits, as he considered that, all theory apart, they would prove a useful addition to the materia medica.

Dr. CLIFFORD ALLBUTT (of Leeds) read a paper "On a Form of Functional Hemiplegia seen in Child-bearing Women." It presents so uniform a clinical group of symptoms, it is so alarming to the patient and her friends, and is nevertheless so certainly curable by appropriate means, that Dr. Allbutt urged the recognition of the affection in our text-books. The affection is nearly always seen on the left side; there is a sense of weight and "numbness," especially affecting the arm, and there is often neuralgia, which is apparently associated with the infra-mammary neuralgia of such persons. The bowels are always disordered, generally confined, and the appetite and digestion are depressed. Dr. Allbutt related several cases of this disorder; in one of them a high authority had diagnosed central nervous disease, but it was nevertheless quite cured. He entered into the difficult question of the pathology of the cases, and also into the question of cure, which required much care and discrimination, but is mainly tonic in character.

Dr. JOHN C. MURRAY read a paper on "Snuff-taking; its utility in preventing bronchitis and consumption." The author stated that the proposition that an habitual snuffer seldom or never died from consumption was consonant with the experience of himself and others. He further declared that six cases of recovery from phthisis consequent upon free snuff-taking had come under his own notice; and concluded that snuff-taking is in some degree preventive of consumption and its frequent concomitant bronchitis, in virtue, perhaps, of its derivative and *quasi*-counterirritant action. The way to cure a cold, according to Dr. Murray, is to have recourse to snuff-taking at once.

Dr. PHILIPSON gave the particulars of a case of Biliary Fistula. The woman, aged twenty-four, was a patient under his care in the Newcastle Infirmary. The fistulous opening was situated at the umbilicus, and had existed for ten months. Eight gall-stones, about the size of small hazel-nuts, had been extracted from the sinus. It was considered that the ductus communis choledochus was pervious, and that in all probability, in consequence of gall-stones having become impacted in the biliary passages, the gall-bladder had become widely distended, and, from consequent inflammation, adherent to the abdominal wall, which subsequently ulcerated. In contrast, the chief points of a case of fistula of the right pleura, in a boy aged seventeen, also in the Newcastle Infirmary, under the care of Dr. Philipson, were given.

Mr. W. ADAMS, F.R.C.S., read a paper "On the Subcutaneous Division of the Neck of the Thigh-bone, as compared with other operations for rectifying extreme distortions at the hip-joint with bony anchylosis." After some general observations on true and false, or bony and ligamentous, anchylosis, and the relative frequency and rapidity with which these conditions are produced after various forms of disease, the author referred to those cases of bony anchylosis of the hip-joint which called for surgical interference, in consequence of the anchylosis having been allowed to take place with the limb in a deformed position; the inconveniences arising from bony anchylosis of the hip-joint depending upon the extent and direction to which the limb may be contracted, and drawn into a deformed position. In females, when the thigh is flexed and adducted so that the knee is drawn across the opposite thigh, the orifice of the vagina is often seriously interfered with, and urination is performed with difficulty, and even a catheter cannot be passed, as occurred in the case recorded by Dr. Sayre; the parts, moreover, are kept in a constant state of excoriation. The author then referred to the various operations which have been proposed and adopted for bony anchylosis of the hip-joint with deformity, such as Rhea Barton's operation, and also that proposed by Louis Sayre, of New York, which he had performed in two cases. In all these operations it was necessary to make a large external incision, so as to admit of the use either of an ordinary saw or of the chain-saw; and although in three cases recorded the result had been successful, so far as rectification of the deformity was concerned, the possibility of the restoration of motion by the formation of a false joint was not clearly established. The author, therefore, advised that the object should be limited to the rectification of the deformity, and obtaining bony anchylosis with the limb in a straight position. This he proposed to accomplish by a subcutaneous division of the neck of the thigh-bone within the capsular ligament, using only a tenotomy knife, and a very small saw three-eighths of an inch in width, with one inch and a half cutting edge, at the end of a small shank, three inches in length. A case in which he had successfully performed this operation was brought before the meeting, and no inflammation whatever had followed the operation; and the author, therefore, felt justified in comparing this operation of the subcutaneous division of bone—or subcutaneous osteotomy—with the subcutaneous division of tendons. The case in which Mr. Adams performed the operation was one for bony anchylosis of the right hip-joint, with the thigh flexed and contracted to a right angle with the pelvis, so that the limb was utterly useless. Bony anchylosis with the limb in a straight position had been obtained as the result of the operation, and the man is now enabled to walk without the assistance of either a crutch or stick; and the bony consolidation at the seat of operation in the neck of the thigh-bone is such as to enable him to bear the whole weight of the body on the limb which had been operated upon.

Mr. WATERHOUSE read a paper "On a new Form of Elevator for Depressed Cranium in Childhood." The author felt diffident in drawing the attention of the members of the Association to the subject of his paper, as it might seem at first sight less important than, on further consideration, it would prove. He thought it, however, his duty to place the instrument before them; for he was convinced that it would not only lessen the immediate risks of cranial operations, but would obviate other dangers which trephining and non-interference involved. Referring to the pathological paradox that peripheral irritation generally excites more nervous functional disturbance than results from direct injury to the brain-substance, he pointed out that the gravity of the damage done in the latter case was often not manifest until some time afterwards; but that severe organic disorder of the mind or brain almost in-

variably follows cranial injury, was a fact not sufficiently recognised. He quoted several authorities on psychological medicine in support of this view. Reviewing the forms of cranial depression which occur at different ages, he showed that his instrument, "the tractor," was adapted for those cases where there was fracture with bending in of the bone. Taking a brief retrospect of the different instruments, ancient and modern, which had been employed in cranial operations, he concluded by showing the *modus operandi* of the tractor.

Mr. TEEVAN read a paper "On Twenty Cases of Stone in the Bladder." The author briefly related the particulars of all the cases, now twenty in number, in which he had operated for stone. Nine of the patients were adults, and eleven boys. Six of the adults were operated on by lithotrity, and three by lithotomy, the latter operation being necessitated in each case by the great size of the calculus. All the boys were operated on by lithotomy. Eighteen of the patients recovered, and were permanently cured, and two died. When possible, lithotrity ought always to be preferred to lithotomy in adults. For the successful performance of lithotrity, the stone ought to be of moderate size, and the bladder not too much diseased. The removal of a calculus by lithotrity was one thing, and the cure of the patient another thing; for there were sufferers now alive in whom surgeons had successfully removed the calculi by the lithotrite, and yet failed to cure the patients—a state of chronic cystitis and paralysis remaining. In old men the lithotrite ought only to be used for a couple of minutes at a sitting, the patients being merely confined to bed for a day or so in each week. The confinement of old men to bed was perilous. In young men large phosphatic stones might be crushed with safety. Extensive heart disease forbad lithotrity, as patients had lost their lives whilst straining in passing fragments. Much information was yet required before we could ascertain the extent to which the introduction of the lithotrite had reduced the mortality after operations for stone. The median operation of lithotomy was only justifiable for small stones, and these had much better be crushed. In lateral lithotomy the stone ought to be cut and not torn out. There was no such thing as dilatation of the prostate: it could be torn, but not dilated. The external incision ought to commence low down, as thereby less blood was lost. The internal incision ought to be free, as the chief dangers incident to lithotomy were phlebitis and pyæmia, resulting from the bruising of the parts in tearing out the stone. A rectangular staff ought to be used, and held with two hands, the lower resting on the pubes. The forceps was unnecessary in children, and often in adults, for in the former the stone could be better removed by the left forefinger, and in the latter a simple polypus forceps ought to be used, when wanted, in preference to the heavy and unwieldy instrument now employed. The introduction of a tube after lithotomy was useless if there were a good assistant in charge of the case. Mr. Teevan concluded by relating the results of a personal examination of the various pathological museums, and of a series of experiments which he had performed on the dead subject.

Mr. SPENCER WATSON read a paper "On Traumatic Ophthalmitis." Two cases were related of this affection treated by unusual methods. In one case rupture of the eyeball was anticipated by a partial excision of the cornea (its lower segment) with satisfactory results. The prevention of suppuration and relief from pain, in another case, was due, in the author's opinion, to an iridectomy performed at an early stage. In this case the ophthalmitis followed an iridodesis.

Mr. FAIRLIE CLARKE contributed a paper "On Some Rare Forms of Opacity of the Cornea." The author, first, related a remarkable case of congenital leucoma, and pointed out the interesting pathological changes that must have occurred in utero before such a blemish could have been produced. He then gave details of three cases of "symmetrical opacity of both cornea" which had lately been under his care; and to these he added two cases of the same disease which have been published by Mr. Bowman. In reviewing the whole series of cases, Mr. Fairlie Clarke drew several conclusions as to the nature and treatment of these affections. The paper was illustrated by sketches, which showed the form and position of the opacities.

Mr. SPENCER WATSON read a paper "On Ulcers of the Cornea, and their Treatment by the Seton." The author observed that vascular ulcers of the cornea are usually consecutive to phlyctenular ophthalmia. They had been successfully treated by him in twenty-two out of twenty-six cases. The usual theory of counter-irritation is not sufficient to explain the beneficial action of the seton, which was explained by another theory. Three cases, with drawings in illustration, were related.

Dr. J. MILNER FOTHERGILL (of Leeds) read a paper "On the Preservative Agency of Lowered Vitality." Premising that health consisted of a balance of parts, as regards power as well as function, the writer instanced a number of illustrations demonstrating the preservative tendency of general impaired health in protracted repair or irremediable injury. In grave injury of an organ he considered a general lowering, by lessening the necessity for functional activity in the organ, as directly tending to preserve it from utter disorganisation. He instanced lessened power of exertion in heart-disease; the lessened capacity to eat in the consumptive, thus keeping the amount of food down to the capacity of the organism to digest it; the avoidance of nitrogenous food by the sufferers from chronic renal disease. After giving some cases illustrating the position taken up, he concluded by stating that, in many cases, a general impairment of health, by tending to maintain an equilibrium, was directly preservative in its action.

Dr. HENRY BENNET read a paper "On the Connexion between Inflammatory Conditions of the Uterus and its Displacements." The purport of this paper will be best given in the recapitulation by which the author concludes it:—"1. I consider that, under the influence of mechanical doctrines pushed to an extreme, uterine displacements are by many too much studied *per se*, independently of the inflammatory lesions that complicate and often occasion them. 2. That the examinations made to ascertain the existence of inflammatory complications are often not made with sufficient care and minuteness, as evidenced by the fact that I constantly see in practice cases in which inflammatory lesions have been entirely neglected, and the secondary displacements alone treated. 3. That inflammatory lesions are often the principal cause of the uterine displacements through the enlargement and increased weight of the uterus, or of a portion of its tissues, which they occasion. 4. That when such inflammatory conditions exist, as a rule they should be treated and cured, and then time given to nature to absorb morbid enlargements before mechanical means of treatment are resorted to."

Dr. E. J. TILT read a paper "On Uterine Pathology at the Change of Life and after the Menopause." The author was able to confirm the general belief that the change of life is a perilous period for those women who enter it in a state of disease, particularly if they are suffering from any uterine affection. Not only are uterine affections then made worse, but they prolong the change, and retard cessation. Dr. Tilt also confirmed the belief in the powerful help that the menopause brought in aid to medicine to enable us to cure cases of intractable chronic uterine inflammation, and to prevent uterine displacements being any longer a fruitful source of painful symptoms, although the displacements still continued to be almost as great as before the menopause. After reminding his hearers that heteramorphous growths became unusually frequent after cessation, Dr. Tilt sketched the influence of the menopause on those forms of uterine disease which had previously been so frequent—irritation, congestion, inflammation, and ulceration of the womb. He passed in review the diseases that had come under his observation in the order of their greatest frequency, and gave chronicity as their chief characteristic.

Dr. GRAILY HEWITT read a paper "On a New Instrument for Securing the Pedicle in the Operation of Ovariotomy." Adopting the conclusion that the best method of treating the pedicle in ovariotomy is to bring it to the surface of the wound, the author suggests a new method of securing it in that position. A framework of steel, shaped somewhat like a shoe buckle, measuring two inches and a half by one and three quarters, the steel band being two-eighths of an inch wide, and one-eighth of an inch thick, is provided with studs, eight in number, fixed on the framework. These studs project three-eighths of an inch. The pedicle is to be tied in two or three segments, according to its size, by double twine ligatures, and the ends fixed to the studs of the framework, the ligature acting much as the tongue of a buckle. Thus the pedicle can be easily maintained at the

surface of the wound, easily treated, and the treating materially expedited.

Dr. SKINNER, of Liverpool, read a paper descriptive of a new Pessary for prolapsus uteri, rectocele, and vesicocele. The *form* of it is similar to one which was the joint production of the late Professor Sir James Y. Simpson and himself; but the *principle* of it is that of the pessary of Professor Schwank—namely, a folding one. It is composed of vulcanite and German silver, and is made in three sizes, No. 2 being the one most universally applicable. As no written description can give a just idea of the instrument without seeing it, we must refer our readers to the original and, at present, only recognised makers—namely, Messrs. S. Maw, Son, and Thompson, of Aldersgate-street, City, and Mr. Reynolds, of St. Anne-street, Liverpool. Dr. Skinner applied No. 2 in a case where the uterus was prolapsed half way down the thigh, and it was a perfect success. The patient has worn no other instrument these three months, and she reports herself "comfortable and well," and that she has no difficulty in managing it herself.

Dr. AVELING (of Rochester) read a paper "On the Advantages to be derived from Curving the Handles of Midwifery Forceps." The author proposes to curve the handles of midwifery forceps backwards throughout their whole length, by which means the blades are more easily introduced, and the instrument locked. But the great advantage to be derived from this modification is the increased traction power which it gives—the handles being placed at an angle to the line of traction instead of parallel to it.

Dr. G. H. PHILIPSON read a paper entitled "Health and Meteorology of Newcastle and Gateshead during the years 1868 and 1869." After a short history of the registration of disease, a series of statistical statements obtained by the collation of the returns were given, of which the following have been taken. The total of the new cases of disease and injuries occasioned by accident, observed in the public practice of Newcastle, in the year 1868, amounted to 16,059, and in 1869 to 17,084; and in Gateshead, in 1868 to 4665, and in 1869 to 6075. The total of the seizures from diseases dependent upon a morbid condition of the blood, in Newcastle, in 1868, amounted to 3445, and in 1869 to 2540; and in Gateshead, in 1868, to 945, and in 1869 to 1013. The total of the deaths from all causes in the public practice of Newcastle, in 1868 was 728, and in 1869, 736; and in Gateshead, in 1868, 101, and in 1869, 99. After acknowledging the kindness of the contributors, and of the Northumberland and Durham Medical Society, under whose fostering care the plan had been developed and carried on, it was stated that the Society had undertaken to defray the expenses of the printing, issuing and collecting the returns, to the end of the present year, but not longer; and if other means were not forthcoming whereby the expenses could be defrayed, it would be obligatory for the registration of disease in Newcastle and Gateshead to be abandoned, a course that would be taken with the utmost reluctance.

Dr. M. W. TAYLOR (of Penrith) read a paper "On the Transmission of Infective Germs of Fevers by means of Fluids." It was argued that if water be capable of holding and maintaining in activity the contagious principles laid out by the dejections of cholera and typhoid, why may not articles of drink and food exposed to a like contamination act as vehicles for the transmission of the morbific virus of these diseases. It was shown how such modes of propagation might occur. Examples were given, one series of observations relating to an epidemic of typhoid, in which the milk from a public dairy was believed to be the medium which carried the infective agent. In another set of observations, a polluted milk supply was shown to be the probable source by which scarlatina was carried into a number of different households.

Dr. EASTWOOD (of Darlington) read a paper "On Intemperance in its Medical and Social Aspects." The scope of this paper was drunkenness in its relation to insanity, crime, and pauperism. The author considered that where drunkenness is voluntary it is a crime, where it is involuntary it is insanity; and Mr. Dalrymple's Habitual Drunkards Bill, withdrawn for the present, is the first public recognition of this close connexion between them. The apprehensions for drunkenness and disorderly conduct, and the consumption of alcoholics, are increasing, and there is more pauperism, much of which is due to intemperance. We are still, like our ancestors, a beer-loving race. The medical profession has hitherto been indifferent to this question, owing partly to the extreme opinions of total abstainers, who are Utopian in their views, and who have not created a sound public opinion. Medical men do harm by prescribing alcoholics thoughtlessly. The Habitual Drunkards Bill ought to be supported, and a reform in the licensing system encouraged. The profession ought to examine the whole subject of intemperance in a scientific spirit, and it is their duty to be the leaders of a great movement to stem the torrent of drunkenness in this country.

Dr. HENRY BENNET contributed a paper "On the Climate of Algeria." The author brought forward important facts deduced from an exploration of Algeria made in the spring of 1869. Algeria is a kind of Switzerland, extending above 400 miles from east to west, from Tunis to Morocco, and about 120 from north to south, from the Mediterranean to the desert of Sahara. This region is entirely occupied by the Mount Atlas, which divides into three ranges, running from east to west—the Lesser Atlas, the Middle Atlas, and the Greater Atlas, with connecting buttresses, and intervening valleys and elevated plains. These mountains, not attaining an elevation of above 7000 feet, do not reach the line of eternal snow, so there are no glaciers to form large rivers. But they are high enough to precipitate rain and snow in winter from moist air. The constant rarefaction of the atmosphere over the immense desert of Sahara causes, nearly all the year round, a rush of cooler air from the northern quarters—that is, from the Mediterranean and the Atlantic, the atmosphere being thus all but constantly charged with moisture winter and summer. Rain and snow fall in abundance during the six months of winter; and heavy dews fall at night both in winter and summer. The climate of the mountain region of Algeria is, therefore, rainy and cold in winter. Algiers, being on the sea level, is warmer; indeed, warmer than the north Mediterranean shores, but moist and rainy. The average rainfall is thirty-six inches; the average number of rainy days is ninety. The climate of Algiers, being thus mild and moist, is not suited to those cases of phthisis that require a dry bracing air, such as is found on the east coast of Spain, and the Genoese Riviera.

THE HEALTH OF CUSTOMS' OFFICERS.

THE Fourteenth Report of the Commissioners of Customs, which has just appeared, contains the usual able and valuable *résumé* by Dr. Dickson, R.N., the medical inspector, of the sanitary condition of the inferior officers of that department. The report is always useful, because it indicates the causes of illness as well as of death. Dr. Dickson, in reporting upon cases of rheumatism, very properly remarks "that other circumstances, as yet imperfectly known, bearing on this and some other rarely fatal but not less distressing and important maladies, might probably be brought to light, were some attempt made to register the sickness as well as the mortality of the kingdom."

It appears from the Report that consumption caused a fifth of the whole sickness and more than half of the mortality of the force. The inspector considers that no class of maladies, with the exception of the respiratory affections, causes so much suffering among all ranks of the community as rheumatism, and appends to the Report a statistical table showing that during the past seven years the total annual number of cases of rheumatism varied from 87 to 139, that the total time off duty from sickness varied from 1394 to 2217 days, that the total sickness as to numbers ranged from 11 to 14 per cent., and the total sickness as to time from 11 to 15 per cent. This Report is as important as it is interesting, for it contains sanitary particulars as to a body of 1047 men, many of whom work out of doors in all weathers, and often under specially unfavourable circumstances. The observations of Dr. Dickson on rheumatism, quoted above, are particularly worthy of attention, and coincide with remarks lately made in the pages of THE LANCET, to the effect that medical men of the present day are too prone to study acute and mortal diseases at the expense of those less vital, but quite as distressing to frail humanity.

Correspondence.

"Audi alteram partem."

THE WAR.

To the Editor of THE LANCET.

SIR,—As I have frequently been asked about the possibility of joining the German Army Medical Service for the time of the war, it may be of interest to your readers to learn that the North German Government is ready to admit British medical men as volunteers in their army hospitals, provided they speak German, that they have the licence to practise medicine and surgery in the United Kingdom, that they place themselves unconditionally at the disposal of the North German Government, and that they have the permission of the English Government to serve as medical volunteers in Germany and that of the North German Embassy or Consulate-General.

The English medical volunteers will, at first at all events, not be employed on the field of action, but only in the lazarettos in the rear of the armies; this, however, would probably not prevent their seeing and doing important surgical work.

The services of English medical volunteers will be regarded as probationary, during at least a fortnight, and they will receive no payment during that period, and no reimbursement for the expenses of their journey; but if their services prove satisfactory they will probably be engaged, and receive payment at the rate of from 6s. to 9s. per day.

I am, Sir, yours, &c.,

Grosvenor-street, W., August 9, 1870. HERMANN WEBER.

ASYLUM ATTENDANTS.

To the Editor of THE LANCET.

SIR,—Many have been the anathemas launched lately against this unfortunate class. They have, as it were, been slapped in the face, knocked down, and when down well pounded, till one wonders that any vitality is left. One quality has stood them in good stead: they are tolerably thick-skinned; they "get down easily," to use an expression of the P.R.; thrashing after thrashing has no more effect on them than on the class dunce of a country school, to whom the little daily episode of birch and blubber is hardly less than a *sine qud non* of his existence. They look placidly on at the conviction of a comrade; "rather you than me" is probably the height of reflection at which they arrive on the subject. To correct their conduct by the standard of the convictors is hardly a proceeding that enters into their heads.

If there is one circumstance more edifying than another in connexion with the chastisement of these objects of popular ire, it is the attitude assumed towards them by their superiors in the same line. Never was there a better example of the parable of the Good Samaritan—in its earlier parts. How beautifully, when one or more attendants lie wounded in the ditch, do these immaculate individuals, staying only, perhaps, to point the finger of scorn, pass by on the other side! "Just what we told you," "Nothing more than you have every right to expect," are the sort of reflections, explicit or implicit, to which the battered victims are treated. Have these officers grown to be fatalists? Is it suddenly discovered that in one minute section of the *genus humanum* there shall neither be retrogression to the point of utter uselessness, nor, above all, development in the direction of utmost usefulness? Is the protoplasm of the asylum attendant a peculiar protoplasm?

From the beginning of historic time, there have been instances, not rare, known and recorded of the influence of man on man. Generals loved and obeyed by their soldiers, magistrates respected and obeyed by the community, preachers reverenced and followed by their auditors, are instances on the vast scale of that which, penetrating everywhere, is the leaven of the human race, the bond of all social union. But here, at length, we have an exception. Take these two classes of men. The individual of the one walks immaculately his daily round through the wards, his head above the debased life around him, benevolently dropping here and there a prescription for the walls, the windows, the floors, or for the boots, the clothes, the bodies, or the minds of his patients. To him, indeed, the shabbiness of a patient is discomfort; the bruising of a patient misery; the tying of a patient's hands or feet or trunk, acute agony. Not a button of a patient's waistcoat must be unloosed, not a speck on a patient's face must be unwashed, not a hair of a patient's head must be harmed, while he is present. And now the individual of the other class. Alas! to him the groans of the patients are food for his soul; their screams are sweetest music; the cracking of their ribs makes heavenly harmony. Truly his ways are most perverse ways; he "travels up and down on his knees over the prostrate bodies of his victims."

Surely these two classes must be separated wide as the poles asunder, else they would soon influence one another. Here, if anywhere, we must have the positive and negative of moral electricity, which, brought in contact, will rush together and produce the equable neutrality, the happy mean, which might be the salvation of asylums. But no! for they are in daily, hourly contact. On the one hand, to realise the cruelty, then the trials of inferiors—to remove the one, to advise and encourage under the other; on the other hand, to realise the felt influence of superiors, to be affected by it, to grow through it to better things,—would these not seem most natural courses? In fact, however, they never find place; the anomaly goes on. How should this be? Are our premises wrong? Are the inferiors less cruel? Are the superiors less immaculate? Or does some strong separating cause intervene? Perhaps the dignity of the superior may go for something. He has been thoroughly initiated into the mysteries of locks and keys, he knows thoroughly how an excited patient is to be put in a padded room in strong clothes, how a suicidal patient is not to be furnished with clothes by which he could hang himself, how an epileptic is not to be entrusted with window-cleaning; he knows also the best sort of stuff for the bed of a "wet and dirty"; he can expatiate learnedly on the respective merits of earth-closets and water-closets. Knowing these and many other things, has he not paid his guinea and become a *medical psychologist*? Shall he contaminate himself by mingling with vulgar attendants? Such feelings may form part of the preventive medium. Else how could it be tolerated that men selected to influence the characters of hundreds of their insane fellow-creatures should fail to influence those of tens of their sane subordinates, with whom their contact is incessant? Was such a state of things ever heard of out of an asylum? Is madness then infectious? "Pay them better and they will be better" is the shout of the day. "Make them better and we will pay them better" is as easily said. In such a need of improvement has it ever been heard of that a leader in the branch called together his underlings in order to tell them, for half-an-hour of an evening, how the insane should be treated? Has a little finger ever been stirred so to ease the burden? What good might not a little yearly course on "Practical handling of the Insane" in each asylum do, when the speaker and the hearers were every day companions in the work?

But I reach the portals of dreamland, and beg only further to subscribe myself,

Sir, your obedient servant,

July 25th, 1870. MIRANS.

PARIS.

(FROM OUR SPECIAL CORRESPONDENT.)

THE WAR.

ON Thursday last, the first ambulance of the International Society for the care of the wounded took its departure from this city for the seat of war. There was a large crowd met to witness the departure; and really it was a stirring sight, and one of much interest, to see the *défilé* as it wound its way along the boulevards up to the Eastern Railway terminus. The *personnel* and every object belonging to the medical train wore the red cross as a distinctive mark. Upwards of 150 *infirmiers* have accompanied the first ambulance. Their dress is a sort of long and loose black frock, with a felt hat

ornamented with the red cross. With regard to the surgeons, there is no obligatory uniform; but they generally wear a dark blue coat, with a white linen cap, on which the red cross stands out in marked contrast.

As I have already informed you, the formation of the International Society here has been quite a success. When Nélaton, Chenu, and others waited on the Emperor at St. Cloud to obtain the necessary authorisation, only about a fortnight ago, there was scarcely a sum of 400 francs in the coffers of the Committee. Since then gifts and bequests, in money or useful objects, have poured in on all sides, and the society have been enabled to equip four complete ambulances for the army. They have also hired a ship, and are getting up a sea ambulance to accompany the French fleet throughout its operations, and to accomplish the charitable work of taking care of the wounded mariners, as well as of the blockaded Prussians. As matters stand, I know not what may become of this part of the arrangements, but the idea was a very excellent one.

The arrangements of the International Society have excited considerable interest here, and I dare say a few details in connexion therewith will not be unwelcome to your readers. With the general objects and aim of the society you are sufficiently acquainted, since it is only a realisation of the plan set down at the general convention at Geneva. It may be well to say, however, that one of the objects of this French branch is to do away with the commissariat, which lays a heavy hand on the French military ambulances, and to organise these free ambulances in such a way as to render the medical authorities entirely independent of it. Their next object is to follow the army and render most effective help to the wounded of both parties without forming part and parcel of the military body. Of course it must be expected that in the accomplishment of this end things will not move on as smoothly as might be wished. Nelaton, Conneau, and others have negotiated with the Emperor at Metz in order to obtain the assistance of the Commissariat for the volunteer ambulances by acquainting them with all the movements of the army, and yet not interfere authoritatively with their proceedings. The working out of this plan will meet with many hindrances.

The Society has been inspired with the desire of rendering most extensive and effective help to the wounded, and thus they have arranged so as to fulfil at the same time all the requirements of this scheme. It was obvious that the picking up the wounded on the field in the midst of a battle, or immediately after it, was a work which required practised skill and experience. The volunteer ambulances have, consequently, renounced this part of the medical operations on the battle-field. Their office commences immediately after the battle has terminated; this seems besides, to be consistent with their international character. On picking up the wounded they will be able, not only to give them the necessary medical and surgical succour, but to provide at once for their ease and comfort; and on the importance of these points, so highly necessary for the eventual recovery of the unfortunate wounded, I need not insist. In order to effect this they may either pitch their tents at once, and arrange so that the patients may remain on the spot until complete recovery, or, if the locality present the requisite conveniences, they may have the wounded transferred to the neighbouring hospitals, where they would receive attendance from the local practitioners. Thus they have corresponded with the mayors and medical men of all the localities which are liable to be in the vicinity of the war, and have received most satisfactory answers. It is to be hoped that the temporary huts or tents which will be got up will be respected by both sides, inasmuch as the International Society is to bear out strictly its appellation, and give equal succour and attendance to the combatants of both nations. According to the above arrangements, the wounded will be cared and provided for as the army marches on, and the ambulance surgeons will remain free to continue their course, and be ever in proximity with the seat of operations.

How this plan will be worked out remains to be seen. Nélaton is already at head quarters, and though it may be supposed, as was suggested in your last impression, that his attendance may in any emergency be of use to the Emperor, it is also quite obvious that, in his high position and with his great authority, his actual presence by the side of the Sovereign will be of extreme use in furthering the successful working of the volunteer ambulances, and claiming for them proper treatment and protection from the Commissariat and military authorities. It is said that M. Lefort, of Cochin Hospital, who is the next important man in the committee of the Society, has taken to the camp not only effective or working surgeons, but also a certain number of assistants, who are appointed to study the operations of the ambulances, and to report thereon.

I may notice a quite novel and interesting feature among the arrangements of the International Society. It consists in having a certain number of female nurses to attend upon the sick and wounded who are left behind on the march of the army. An appeal has been made to Frenchwomen in order to gather the necessary number of nurses or *infirmières*, and it has been wonderfully answered. More than 2000 names have been put on the register, which remains open at the Palais de l'Industrie. Only forty nurses will accompany each ambulance, and they will be required to perform all the menial offices which will be incumbent upon them, and will be headed by ladies of the highest classes of society, who, under the name of *religieuses*, will exert proper surveillance, and, in a word, do the office of the sisters of mercy of the French hospitals.

It must be said to their credit that the work of the French ladies has been most admirable and zealous in view of the care of the unfortunate wounded. You should see the bustle and animation which mark their special department at the Exhibition Palace. There many ladies of the highest distinction, Mesdames de Rothschild, de Flavigny, Canrobert, André, and others constitute a permanent board appointed to receive gifts of all kinds, to register the names of the volunteer *infirmières*, &c. Their zeal is quite indefatigable. A few days ago I had the pleasure of visiting this department. As your correspondent, I was not considered as an intruder, and I had the good fortune to meet with a most charming lady, who, with infinite *bonne grace* and amiability, informed me of all the details of this department—in the purest English, mark you.

Having done with the International Society, which I considered of especial interest, it may be well to place it in contrast with official military ambulances, concerning which, a friend of mine, who has occupied the high post of army surgeon, has given me complete information. The plan of ambulances which has been adopted for the present campaign is exactly similar to the one which was employed on preceding occasions (Crimea, Italy, &c.), with such unsatisfactory results. The *personnel* of these ambulances, as is well known, is most thoroughly insufficient. The medical men who compose the staff are completely under the control of the commissariat or "intendance," from whom they must ask for everything, and without whose authority they can neither move nor act. This is a universal complaint with French army surgeons, and the inferiority is bitterly felt in time of war. Amongst other things, a surgeon to one of the regiments, writing to a friend of mine, says, that in this campaign the commissariat has resolved to deprive the army surgeons of their horses, and, as a measure of economy, allow them only a sort of cart or *charrette*, in which they are gathered and transferred from one spot to another amid the dust and heat of the season. Another cause of complaint has been the curious medical *cantine* given to the regimental surgeons. It consists of a box, which, when opened, contains only one solitary phial, filled with calomel: it holds no sulphate of soda, no subacetate of lead—in fact, none of the most ordinary medicaments required for the sick or wounded soldier. Besides this, it consists of an extraordinary number of small drawers, which, on any dampness supervening, would render the *cantine* unfit for use. The presence of a large number of pharmaciens on the field, in comparison with the limited number of medical men, has also given rise to much criticism, and it is asked of what earthly use will be so large a number of pharmaciens, unless to "help to make the soldier's soup."

The fact is, that the number of medical men attached to the ambulances is absurdly limited. It has been related to me by French army surgeons that after Magenta their arms had become deadened from operating, and their instruments useless, while there were yet a large number of the French wounded unprovided for, not to mention at least 1500 Austrians. And yet the number remains as limited in this campaign. How this can be is a mystery.

Each division of the army includes one ambulance; and, as there are four divisions to a *corps d'armée*, the total number is four ambulances, to which, however, must be added a fifth attached to the head quarters of the *special corps*. Now each ambulance consists only of five surgeons, making a total of twenty-five surgeons to a division. Obviously this number must be altogether below the requirements of the service, especially during the present campaign, when such energetic and rapid movements are necessary, and when the wounds that are inflicted are so numerous, and of a special character on account of the arms in use. Therefore, the help afforded by the volunteer ambulances must prove invaluable under existing circumstances.

There is much more to be said on the subject, but I observe that I have already exceeded the space which I can command. I shall, therefore, return to the point in my next letter. Doubtless I shall also have much to say concerning the working of the various plans which I have described—I mean their practical results.

I may just conclude by saying that my information leads me to assert that the general health of the army has remained good. Save solitary cases of diarrhœa or dysentery, intermittent fever, and the baneful consequences of excessive fatigue, there is nothing to indicate the preliminary symptoms of any epidemic.

The wounded at the recent combats which have taken place on the frontiers are beginning to arrive, and are transferred to the various military hospitals (the Val de Grâce, Gros Caillou, &c.). It has been remarked that they are mostly wounded in the lower extremities.

The patriotism which is manifested here by the medical bodies is great; not only all the medical men and students have offered their services to the Government, either to follow the ambulances to the frontiers, or to attend the wounded in the military hospitals, but the wives of several distinguished medical men have formed a committee and addressed a circular to all the medical bodies of France, asking for gifts of any kind which may be employed for the benefit of the wounded.

Paris, August 10th, 1870.

THE COLLEGE OF SURGEONS.

AT the meeting of the Council on Thursday, after the transaction of the ordinary business, the minute of March 22nd—"That it is desirable that not less than one-half of the members of the Court of Examiners shall be Fellows who are not, and have not been, members of the Council, and that the resolution shall be carried out as soon as possible,"—was confirmed, with the addition of the words "within twelve months" between the words "not" and "been."

This is obviously an impracticable minute, as the votes for examiners are taken by ballot, and there is no concerted action for carrying it out in the Council. The matter is consequently left as the Charter deals with it.

Mr. Gay's motion was again deferred until November.

Medical News.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Aug. 4th:—

Burgess, W. Fred. Richardson, Bethnal-green-road.
Toupsett, James, St. Leonards-on-Sea.
Walker, Samuel, York.

As Assistant in Compounding and Dispensing Medicines:—

Slater, Jonathan, Barnsbury-road.

The following gentlemen also on the same day passed their first professional examination:—

Arthur Culver James and William Rendall, Guy's; William Geo. Watson, University College; William Odell, St. Bartholomew's.

UNIVERSITY OF ABERDEEN—The following are lists of candidates who have recently received the undermentioned Medical and Surgical degrees:—

DEGREE OF M.D.

Collins, Alexander, Bervie.
Davidson, Alexander Dyce, Aberdeen.
Flint, Frederic, Norwich.
Freeman, Alfred John, Southsea, Hants.
Grant, James, Longton, Staffordshire.
Hope, William, London.
Jefferson, Thomas Jewison, Market-Weighton, Yorks.
Jones, Thomas, London.
Kennedy, William, Caulsbay, Wick.
Lole, John Vacy, Durban, Natal.
Morgan, Lewis Wayne, The Hafod, Glamorganshire.
Philpots, Edward Payne, Leamington.
Rayner, Henry, Hythe, Kent.
Reid, Alexander, Wokingham, Berks.
Smith, Joseph Hume, Methlick.
Thomas, John Lewis, Nottingham.
Watson, William, Indian Army.
Whyte, John, H.M.S. "Scylla."

DEGREE OF M.B.

Allan, Hector, Evanton, Ross-shire.
Anderson, Alexander Thomas, Marnoch, Huntly.
Beattie, George Watson, Strathdon.
Blacklock, Arthur Woolsey, Brighton.
Blake, Edward Thomas, Taunton.
Bodman, Francis Henry, Calne, Wiltshire.
Cooke, Edleston Harvey, Jamaica.
Cullen, James, Calcutta.
Davidson, John, Aberdeen.
Davies, Christopher James, Barbadoes.
Dewar, James, Fochabers.
Duncan, James, Aberdeen.
Ellis, Henry Vause, Crowle, Doncaster.
Hay, Peter Grant, Elgin.
Letters, Patrick, Aberdeen.
Mair, Edward, Aberdeen.
Manson, David, Aberdeen.
Matheson, John, Urray, Ross-shire.
Merson, John, Cabrach.
Morison, George, Aberdeen.
Munro, Alexander Begg, Melrose.
Orchard, Thomas Nathaniel, Kingussie, Inverness-shire.
Ostlere, Robert, Halifax.
Robertson, George, Banchory-Ternan.
Simpson, William, Fochabers.
Smith, Patrick Blaikie, Aberdeen.
Sutherland, James, Skelbo, Dornoch.
Thomson, George, Belhelvie.
Walker, Alexander, Uduy.
Walker, Alexander, Banff.
Wattie, Charles Lindsay, Glenbucket.
Whitelaw, William, Dunfermline.
Yeats, William, Aberdeen.

DEGREE OF C.M.

Allan, Hector.	Merson, John.
Anderson, Alex. Thomas.	Morison, George.
Beattie, George Watson.	Munro, Alexander B.
Blacklock, Arthur Woolsey.	Orchard, Thomas N.
Cooke, Edleston H.	Ostlere, Robert.
Cullen, James.	Robertson, George.
Davidson, John.	Simpson, William.
Davis, Christopher James.	Smith, Patrick B.
Dewar, James.	Sutherland, James.
Duncan, James.	Thomson, George.
Ellis, Henry Vause.	Walker, Alexander.
Hay, Peter Grant.	Walker, Alexander.
McKilliam, Robert.	Wattie, Charles L.
Letters, Patrick.	Whitelaw, William.
Mair, Edward.	Wybrants, Jonathan.
Manson, David.	Yeats, William.
Matheson, John.	

Of the above-mentioned candidates, John Davidson, Edward Mair, John Merson, Patrick Blaikie Smith, and Alexander Walker received their degrees in Medicine and Surgery with Highest Academical Honours; John Matheson, Alexander Begg Munro, and George Thomson, their degrees in Surgery, and William Yeats his degree in Medicine, each with Academical Honours. At the same time, James Stewart Orchard was certified as having passed all the examinations, and is entitled to receive degrees on his attaining the necessary age.

ROYAL COLLEGE OF SURGEONS OF IRELAND. — At an examination held on July 26th and following days, the licence to practise Surgery was obtained by the following gentlemen:—

Charles Dunscombe Allen, Thomas Allman, Arthur Edward Jas. Barker, Richard John Barry, Thomas Elwood Lindesay Bate, George Frederick Bevan, William John Brownrigg Bookey, John Allen Bolton, William Augustus Concannon, John Charles Crozier Durham, John Dallas Edge, Robert Fair Fraser, William John Gibson, Arthur Paget Green, John St. Clair Gunning, Francis Meagher Barricks, Lewis Allen Irving, Alex. Richard Joyce, Robert Willcocks Kelly, John Kilbride, John William Kennedy, Edward Levinge, John Henry Lyddon, Thomas Maguire, Andrew Leslie Meese, Frederick Alcock Nixon, Wm. Francis Norman O'Loughlin, Joseph Petit, Thomas Popham, Robert Hamilton Reed, Daniel M'Clure Ross, Robert Saunderson, Jas. Sheehy, Samuel Parsons Smith, Frederick Henry Smyth, William Joseph Volatti.

The following gentlemen passed their primary examinations in Anatomy, Physiology, and Materia Medica, at a meeting of the Court of Examiners held on July 12th and following days:—

John Gower Allen, George Frederick Bevan, Daniel Boyle, John Thomas Burgoyne, Walter Burney, Patrick Butler, Richard Ashmore Clarke, John V. Charles Denning, John Dallas Edge, Francis Forster, Henry John Forster, David James Freeman, Otho Galgey, Alex. Richard Joyce, John Lawler, Edward Levinge, Charles Little, Francis Reginald Loftie, Ross Ferrier Maguire, Andrew Leslie Meese, Ayres Moore, William

Neale, William Henry Ovenden, Richard Charles Mason Podley, Thomas Reardon, Richard Edmund Ross, Nicholas Crawford Ross, John Wm. Scarry, Charles H. Smith, Frederick Henry Smyth, Robert Wright Sterling, William Sandham Symes, Edward Thomas, Henry Francis La Touche White.

THE library of the Royal Medical and Chirurgical Society will be closed from Monday, August 15th, to Saturday, September 10th, both days inclusive.

AID TO THE SICK AND WOUNDED.—The Society established in this country for the relief of the sick and hurt in time of war have sent to the scene of hostilities Dr. Mayo, Dr. Duret Aubin, Mr. Henry Rundle, F.R.C.S., Mr. William Ward, M.R.C.S., Mr. W. Pratt, M.R.C.S., and Mr. Atthill as dresser.

ROYAL MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.—On the 3rd inst., the usual quarterly meeting of the Committee of the Belfast Branch of the above Society was held, when the chair was filled by Professor Cuming, M.D. The report was made that Dr. Browne, R.N., mayor of Belfast, had attended as a deputation at the recently held annual meeting of the Society at large in Dublin, which proved to be a very full and influential one, and at which, according to the official statements that were made, the affairs of the Society appeared to be prospering, and that a steady increase of supporters was on the subscription-roll. The meeting had under discussion a subject which has been already frequently before it—namely, the large number comparatively of the profession, both in town and in the country districts, who lend a deaf ear to the earnest calls made upon them to give their countenance and support to the Society. It was hoped, however, that this apathy would give way to a kindlier and more generous line of action.

A DONATION of £100 has been presented by the Right Hon. the Speaker of the House of Commons to the Westminster Hospital. A donation of 100 guineas has also been presented by the Mercers' Company to the same institution.

Mr. HENRY GRAVES, of Pall-mall, has presented to the Royal Free Hospital, Gray's-inn-road, through Dr. O'Connor, physician to the hospital, a valuable collection of engravings for the wards of the institution.

THE will of Thomas William Burt, Esq., M.D., formerly surgeon to the Hon. E. I. C. Bengal Medical Establishment, and late of No. 2, Obere Promenade, Homburg, Prussia, was proved in London on the 7th inst., and the personalty in England sworn under £30,000.

THE sixty-seventh annual meeting of the Lincolnshire Medical Benevolent Society was held lately at Lincoln. This Society was established in 1804 for the relief of distressed widows and orphans of medical men in the county, and since its formation has afforded aid to the extent of £4000. It has now funded property to the value of more than £2000.

SUDDEN DEATH OF A PHYSICIAN. — A painful sensation was caused on Tuesday last by the announcement that Dr. Banks, one of the oldest and most respected of the medical profession in Lincoln, had been found dead in his bed. The cause of death is believed to have been heart-disease; and as Dr. Banks has been known to have suffered from that complaint for some years, no inquest was considered necessary. A few months since the deceased gentleman was thrown out of his gig, and it is by no means improbable that his death was accelerated by the shock given to the nervous system at that time.

VENEREAL, CUTANEOUS, AND THROAT DISEASES AT THE UNIVERSITY OF VIENNA.—M. Sigmund, in a letter to the editor of *L'Imparziale* of Florence, states that, after twenty years' teaching the theory and practice of venereal diseases at the Faculty in the capacity of extraordinary (or private) professor, the authorities have, at last, founded a regular chair, with 100 beds for men, and 100 for women, the actual *clinique* being concentrated in two wards of 25 beds for each sex. The professor may fill the latter, at his pleasure, from the general wards for venereal diseases, and also from the patients in the reception-room. M. Sigmund congratulates himself on being a mercurialist, and insists on using a very generous diet for the patients. The same changes have taken place for the chairs of skin diseases, and the affections of the throat.

Medical Appointments.

ASHE, Dr. I., has been appointed Medical Attendant to the Letterkenny Constabulary, vice H. Thorp, M.D., deceased.

BRUCE, R., L.R.C.S.Ed., has been elected Medical Officer for District No. 7 of St. Luke's Division, Holborn Union.

CARRE, Dr. G., has been appointed Consulting and Visiting Physician to the Donegal District Lunatic Asylum, Letterkenny, vice H. Thorp, M.D., deceased.

CARTER, R., M.D., has been appointed Assistant Medical Officer, Female Department, Middlesex Lunatic Asylum, Colney Hatch, vice J. Adam, M.D., appointed Medical Superintendent of the Metropolitan Asylum District Asylum for Imbeciles, Caterham.

CLEAVER, W. J., M.B., C.M., late Resident Surgeon to the Clinical Surgical Wards of the Edinburgh Royal Infirmary, has been appointed House-Surgeon to the Liverpool Royal Infirmary, vice C. Puzey, L.R.C.P.L., resigned.

CROSSKEY, W. F., M.D., has been appointed a Medical Officer to the Lewes Dispensary.

DAVIDSON, S., M.D., has been elected President of the Garioch Medical Association for 1870-71.

DUNCAN, J., M.D., has been appointed House-Surgeon to the Ashton-under-Lyne District Infirmary, vice Alex. Hamilton, L.R.C.P.Ed., resigned.

ELLIOT, G. S., L.R.C.P.Ed., Assistant Medical Officer at the Coton-hill Lunatic Asylum, Stafford, has been appointed Assistant Medical Officer at the Metropolitan Asylum District Asylum, Caterham.

GRAHAM, Mr. A., has been appointed Dispenser for the Out-door Poor of the Strand Union, Bow-street.

HARDMAN, Mr. W., has been appointed Physicians' Assistant at the Middlesex Hospital, vice Dr. G. A. Simpson, whose term of office had expired.

JEAFFRESON, Mr. C. S., has been elected Assistant-Surgeon to the Newcastle-upon-Tyne Infirmary, vice L. Armstrong, L.R.C.P.Ed., promoted.

LOVELL, F. O., M.R.C.S.E., has been appointed Resident Medical Officer at St. Peter's Hospital for Stone, Berners-street, vice Chas. A. Robinson, M.R.C.S.E., deceased.

LUCAS, ST. J. W., M.R.C.S.E., has been appointed House-Surgeon at the Royal Infirmary and Dispensary, Windsor, vice James O. Blair, M.D., resigned.

MACDOUGALL, A., M.B., has been appointed Senior Resident Physician at the Royal Infirmary, Edinburgh.

M'KNOWN, W. A., M.D., has been appointed Assistant at the Royal South London Ophthalmic Hospital, St. George's-circus.

MACKINTOSH, D., M.D., has been appointed Medical Officer to St. Thomas's Amicable Benefit Society at Southsea, Landport, Portsmouth, and Gosport.

SANDERSON, J. B., M.D., has been appointed Professor of Practical Physiology and Histology at University College, London, vice M. Foster, M.D., appointed Praelector on Physiology at Trinity College, Cambridge.

SMITH, H. A., M.R.C.S.E., has been appointed Resident Surgeon at Christ's Hospital, Newgate-street, vice Thos. Stone, F.R.C.S.E., resigned.

SMITH, J. K., L.R.C.P.Ed., has been appointed Surgeon to the Stanley Hospital, Liverpool.

SPENCER, Mr. W. H., M.A., F.L.S., &c., has been appointed Medical Tutor at the University of Durham College of Medicine, Newcastle-on-Tyne.

STRANGE, A., M.D., Assistant Medical Officer at the Cheshire Lunatic Asylum, Upton, has been appointed Assistant Medical Officer at the Metropolitan Asylum District Asylum, Leavesden.

YARROW, G. E., M.D., has been elected Medical Officer for the City-road and Bath-street Workhouses, St. Luke's Division, vice Harris, deceased.

Births, Marriages, and Deaths.

BIRTHS.

COATHUPE.—On the 8th inst., at Broughton, Manchester, the wife of Edwin Coathupe, M.R.C.S., of a daughter.

DAWSON.—On the 5th inst., at Hunmanby, Yorkshire, the wife of C. W. Dawson, Surgeon, of a son.

GOODING.—On the 9th inst., at Heath Lodge, Blackheath, the wife of Ralph Gooding, B.A., M.D., of a daughter.

HINE.—On the 5th inst., at Swineshead, Lincolnshire, the wife of William Conway Hine, M.R.C.S.E., of a son.

PERKINS.—On the 5th inst., at Hendon, Middlesex, the wife of John Robert Perkins, L.R.C.S., &c., of a son.

PERKS.—On the 5th inst., at Burton-on-Trent, the wife of Charles Perks, L.R.C.P., of a daughter.

TATTERSALL.—On the 4th inst., at Stacksteads, near Manchester, the wife of W. J. Tattersall, M.R.C.S.E., of a son, still-born.

MARRIAGES.

JONES—BROUGHTON.—On the 3rd inst., at St. Mary's, Brecon, John Talfourd Jones, M.B. and Scholar London University, to Mary Grundy, eldest daughter of Frederick Broughton, Esq.

MEREDITH—JONES.—On the 10th inst., at Llanwnnen, Cardiganshire, John Meredith, M.D., Bengal Service, to Sophia, youngest daughter of the late William Jones, Esq., of Hafodau, Aberystwyth.

DEATHS.

BANKS.—On the 2nd inst. (suddenly, of heart-disease), at the Minster-yard, Lincoln, John T. Banks, M.D., aged 63.

DERMER.—On the 5th inst., at St. Leonards-on-Sea, Wm. Dermer, M.D., of Pembridge-crescent, Bayswater, formerly of Tasmania, aged 67.

GOODRIDGE.—On the 4th inst., J. J. Goodridge, M.R.C.S.E., of Paignton, Devon, aged 76.

GORRINGE.—On the 4th inst., at Cambridge, John Gorringe, M.R.C.S.E., Staff Surgeon-Major Army, aged 45.

WILSON.—On the 10th inst., at Addison-road, Kensington, John Wilson, M.D., R.N., aged 82.

Medical Diary of the Week.

Monday, Aug. 15.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

Tuesday, Aug. 16.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.

Wednesday, Aug. 17.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
CANCER HOSPITAL.—Operations, 3 P.M.

Thursday, Aug. 18.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Friday, Aug. 19.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, Aug. 20.

ST. THOMAS'S HOSPITAL.—Operations, 9½ A.M.
HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

Notes, Short Comments, and Answers to Correspondents.

SERVING MEDICALLY IN THE FRENCH ARMY.

A CORRESPONDENT informs us that, being anxious to go out as surgeon in the French army, he applied to M. Fleury, Consul-General in London, the day after war was declared. M. Fleury could give no idea as to whether our correspondent could obtain the rank, pay, and rations of a surgeon in the French army; but advised his writing to the Minister of War in Paris. Then, however, came the proclamation of neutrality, which is only to be eluded by first going to the continent, and then offering to serve.

Mr. Charles Roberts, A Constant Reader, and others.—The process is described by the late Dr. Clark himself in a letter to the Chairman of the Royal Commission on Water-supply, dated 30th October, 1867. (*Vide* Appendix G to Minutes of Evidence, p. 41.) "The invention," says Dr. Clark, "is a chemical one for expelling chalk by chalk," and this is done by adding to a given quantity of water from one-eighth to one-ninth its bulk of water saturated with lime. The evidence of Mr. S. C. Homersham, C.E. (Questions 6762 *et seq.*) explains how the process is worked on a large scale.

A DISTINCTION WITHOUT A DIFFERENCE.

To the Editor of THE LANCET.

SIR,—I am an assistant to a medical man, am doubly qualified and registered, and was about to give evidence in court in a case of lunacy which I had been attending for some time, when I was informed by the stipendiary magistrate's clerk that my evidence would not be taken, as I was *not*, according to the Lunacy Act, in actual practice. Now, Sir, was the worthy magistrate justified in refusing my evidence simply because I was *not* in practice on my own account? This is a question which is of great importance both to principal and assistant; and as this is the first case of the kind which has occurred to me, or come within my knowledge, I have thought it advisable to communicate particulars, that the subject may be fully discussed in your journal, and with the hope that you will favour me with your opinion on the matter. Yours obediently,

Sheerness, August 6th, 1870. W. S. PARK.

*** We are of opinion that the magistrate, or the magistrate's clerk, was certainly not justified in refusing our correspondent's evidence on the ground of his not being in actual practice. He is in actual practice within the meaning of the Lunacy Act.—ED. L.

THE TEMPERATURE OF NEWLY-BORN CHILDREN.

A PAPER by Dr. T. J. Maclagan, of Dundee, published in the "Transactions of the Royal Society of Edinburgh," contains some observations on this subject, which may prove interesting to our readers. The observations which form the basis of the paper were made in the Edinburgh Maternity Hospital, with the object of determining whether the temperature of newly-born children differed from that of adults; and if so, how and to what extent. Dr. Maclagan concludes that the temperature of the child at birth is the same as that of the mother. If hers be high during the second stage of labour, that of the infant at birth will show a corresponding elevation; if normal, so also will the child's be. The range of the first few hours after birth was altogether peculiar. The thermometer always showed a fall, which varied in different cases both in rapidity and extent, but which was never altogether absent. In children born at the full time, the average period after birth at which the temperature reached its lowest point was 2 hours. The average extent of the fall was 5° below the usual standard of the adult. The mean time which elapsed before the temperature again rose to what might be regarded as its normal range was 22·25 hours after birth; the shortest was 2 hours; the longest, 44. In one sickly child it was 4 days before the depression was recovered from. The observations after the first 24 hours were made morning and evening only. 16 cases were selected, in which no disturbing element intervened likely to affect the normal range, and it is inferred that the child's temperature during the first few days of its existence is a degree lower than that of the adult. The various circumstances by which the author accounts for the range of temperature of the first few hours of the child's separate existence are the following:—The effect of the sudden change from the high temperature of the uterus to the low one of the external air, and, still more, the refrigerating influence of respiration. That the last is the chief, if not the sole, agent in producing the great and sudden fall which takes place immediately after birth, the author considers to be borne out by what he observed in the case of a child, apparently still-born, in which the temperature in the rectum during the first half hour after birth (immediately after respiration was established) was 98·3°; in the next half hour it fell to 92·6°. He thinks the rapid and transient lowering of the child's temperature during the first few hours of extra-uterine life is simply owing to the absence of due nervous influence.

Mr. W. Wilkinson (Gisburne.) — Sir Henry Thompson's work, or Mr. Coulson's.

MILITARY SURGERY.

THIS is an interesting subject at the present time, and our readers may perhaps like to see the questions put by Professor Longmore at the examination of assistant-surgeons at the Army Medical School, Netley.

III. *Military Surgery*—Deputy Inspector-General Longmore, C.B.

Wednesday, August 3rd, 1870. (Three hours allowed.)

1. Give concisely an account of the articles comprising the regulated equipment for British field hospitals in time of war.
2. Gunshot wounds of the knee-joint.
   - A. Explain the circumstances which render gunshot wounds more hazardous than incised or stabbing wounds of the same joint.
   - B. State the recorded results of gunshot wounds of the knee-joint during the war of the rebellion in the United States, and during the Bohemian war of 1866. Compare these results with the experience gained by English surgeons during the wars on the Continent between 1808 and 1815, and also during the Crimean war.
   - C. What have been the results in recent wars of treating gunshot wounds of the knee-joint (*a*) by freely incising the joint,
     (*b*) by excising the joint,
     (*c*) by amputation above the joint, and
     (*d*) by conservative practice?
3. A patient with defective vision is submitted for your opinion, and you report that, after examination with the 10-inch convex spectacles, you find he has myopia=1-15 and amblyopia. Explain the steps by which you arrive at this conclusion.
4. *Surgery and Surgical Anatomy.* Shoulder-joint.
   - A. Describe the operation of excising the shoulder-joint by single straight incision in the ordinary method.
     (Mems: Each step of the operation must be distinctly described. The several structures divided are to be named.)
   - B. What muscles and other structures divided by the ordinary method are left undivided when the same operation is performed subperiosteally?
   - C. Name the anatomical structures not cut in excision of the joint, which would be divided if amputation at the shoulder-joint were performed instead.

Mr. Jonas King has seen two cases of separation of the sacro-iliac synchondrosis without displacement—one in a servant of the London and South-Western Railway Company, who was caught between the buffers of two carriages, with the result of the left synchondrosis being ruptured; and the other in a woman, who, when in labour with her third child, sustained rupture of the right sacro-iliac synchondrosis, also without displacement.

Dr. Edward Hughes.—The announcement appeared in our number for July 30th.

ADVERTISING PAMPHLETS.

WE have received a pamphlet entitled "Health and Disease (in English and Welsh), by Dr. J. L. Prichard, M.D.," &c. It contains numerous certificates and letters from different persons, all laudatory of Dr. Prichard and his treatment. The address at which the "doctor" may be consulted of course, occupies a prominent position. There is a "J. L. Prichard, M.D. St. Andrews, L.R.C.P. Ed.," &c. of Merthyr Tydfil, in the Medical Directory. We would fain believe, however, that he cannot be the author of a pamphlet which reflects so little credit on a professional man.

THE ACTUAL DUTIES OF THE VOLUNTARY AMBULANCES.

DR. DECHAMBRE, editor of the *Gazette Hebdomadaire* of Paris, to prevent misconceptions, gives in a late number (August 5th) some interesting details on the subject. Each ambulance carries—first, 51 small tents, which can be connected by threes, and form 17 large tents, capable of accommodating 24 patients; second, 300 stretchers in the form of beds, with canvas sacks, intended to be filled and turned into palliasses, which latter will be supplied with waterproof sheets; third, 100 stretchers, as used by military surgeons; fourth, 10 stretchers on wheels and 10 small waggons; fifth, 20 cart horses and about 30 saddle horses. (All the surgeons, save the acting assistants, ride on horseback.) The ambulance, during battle, is stationed in the rear with the reserves. The severe duty of raising the wounded from the ground, tending them, and carrying them to the rear, under fire, requires coolness and familiarity with gunpowder. This duty devolves solely on military surgeons. But when the conflict is over, the voluntary surgeons hasten to the field of battle with their implements for carrying the wounded, and then begin the actual duties of the international ambulances. They first afford much assistance to military surgeons by the number of hands ready for work, as the former are comparatively few for each army ambulance. By this assistance are prevented those heart-rending scenes, where surgeons, exhausted by fatigue, surrounded by heaps of removed limbs, can work no longer, and sink under the task. The voluntary surgeons now perform a *special international* duty—viz., the fetching, tending, and carrying the wounded of the enemy; this sacred duty is respected by all, and rendered practicable by the distinctive badge. Lastly, and this is the most important part of the work, the international ambulances establish on the spot temporary hospitals for such of the wounded as cannot be carried off. Instead of dragging away, in case of retreat, all the victims of fire and sword, the ambulance places them under tents, and, if necessary, in houses of a neighbouring village. On such houses the neutral flag is planted, so as to protect the wounded, and the voluntary surgeons keep with the latter until recovery. The military ambulances cannot, of course, act in the same manner, as they must follow the troops in their movements. The international assistance has also the advantage of a reserve of civil surgeons in various parts of the country, who, without being regularly enrolled, have promised their help in case of need. These reserves will, in fact, transform the ambulances into hospitals, by either using wooden houses or private dwellings, when the international ambulance will have to move up again to the troops, to recommence active field duty. Whether the neutral hospitals will always be respected, and whether they may not be sacrificed to the terrible necessities of war, admits of doubt. But it may be hoped that Generals will treat them with consideration, as these hospitals have an international character, and as the inmates, to whichever army they may belong, are, according to the Geneva Convention, *not considered as prisoners*, but are to be sent home without exchange.

Query.—It is needless for us to say that such charges greatly tend to lower the dignity of the profession. Probably the opinion given was next to worthless. At any rate the attendant charged as if he thought so.

Mr. J. S. Dickinson is thanked for his paper, which shall appear in an early number.

A Well-wisher to King's might rest the efficiency of his *alma mater* on much better *instantiæ prærogativæ* than those he cites.

PAY OF REGIMENTAL MILITARY AND MEDICAL OFFICERS.

To the Editor of THE LANCET.

SIR,—I shall feel very much obliged if you will publish, for the information of Mr. Grant Duff and others, the following scale of unemployed and staff pay of regimental military and medical officers of equal relative rank in H.M. Indian army.

Military Officers with Native Infantry Regiments.

Rank.	Pay of Rank.	Staff Pay.	Total Pay per Mensem.
	r. a. p.	r. a. p.	r. a. p.
Lieut.-Colonel commanding	827 14 0	600 0 0	1427 14 0
Major, second in command	640 14 0	270 0 0	910 14 0
Captain and Wing Officer	374 1 6	230 0 0	604 1 6
Lieutenant and Adjutant	225 12 0	250 0 0	475 12 0

Medical Officers with Native Infantry Regiments.

Surgeon-Major in medical charge...	1056 9 7	0 0 0	1056 9 7
Surgeon in medical charge	789 3 0	10 13 0	800 0 0
Assist.-Surgeon of 6 years' service in medical charge	433 10 0	166 6 0	600 0 0
Assist.-Surgeon of 5 years' service in medical charge	304 14 2	145 1 10	450 0 0

The above is copied from the pay code, and I certify that it is perfectly correct. In all cases the medical officer is older than the military one of same relative rank. The medical officer has to pay to enter his profession; the Indian military officer pays nothing for his commission. The medical officer is not allowed to retain his appointment on furlough; the military officer is. The medical officer at mess is junior to the youngest military officer as to precedence at table, &c. The medical officer is, therefore, worse off as regards pay, position, and prospects than the military one.

I am, Sir, yours truly,
JOHN C. MORICE,
Rawalpindee, June 5th, 1870. Surgeon, 16th Bengal Cavalry.

SOFT WATER.

MR. BATEMAN, C.E., combats the notion that soft water is prejudicial to health. Addressing the Manchester Town Council on the subject, he asserts that the data on which the notion rests will not bear scrutiny. While soft water forms a quite wholesome drink, its economic benefits are so great that the community may consider itself happy which is favoured with such pure, soft water as is vouchsafed to Glasgow and Manchester.

A Medical Assistant.—We must decline to insert the communication.

THE TREATMENT OF SCARLATINA.

To the Editor of THE LANCET.

SIR,—As the successful treatment of scarlatina is of such vital importance, I hope you will grant me a reply to the very courteous letters of Messrs. Fergus, Thompson, and others that have appeared in THE LANCET.

I shall limit myself to the chief points of divergence, saying nothing on the main practical questions on which we agree; but cannot understand how it is that those who advocate sponging the body in scarlatina should have so few deaths—in one instance no death occurred in 200 cases; in another, 1 in 60; in another, 1 in 30. Whence, then, the fearful mortality as proved by statistics?—especially as the writers represent the cold affusion as the general practice of the profession, on which they suggest no improvement or change. We know that the disease at this present moment is carrying off its victims by scores per week. Perhaps the statement of so few deaths relates to the acute stage of the disease. They do not include death from the results of scarlatina, such as albuminuria, &c. &c.

Unintentionally Dr. Fergus has incorrectly stated my use of calomel, as though I used it frequently to act on the system generally; but if he will refer to my paper, he will find that I only administer a dose at the onset of the disease. Calomel in its mercurial action would, I agree with him, promote waste of tissue, and would do harm; but when combined with castor oil, and used as a purgative, it cleanses the mucous membrane of the bowels better than any other remedy. On account of the sympathy between the skin and mucous membranes, it diminishes the intense heat of scarlet fever. It can do no harm to remove "large clogged and offensive motions," which are very different from motions the result of free mercurial irritation, which I admit are very pernicious in scarlet fever.

The *sedes quæstio* is really cold affusion in scarlet fever. Drs. Fergus and Thompson assert that my views are contradicted by experience. They are sustained, first, by my own experience, which has been extensive, and by that of many of the most capable in the profession. Rural practitioners, as a rule, object to cold affusion; they are, as a class, at once bold and cautious; and as they mostly act on an undivided responsibility, they stand or fall by results much more than any other class of physicians. It is very difficult to settle a discrepancy between observers. "Will Dr. Sweeting state precisely how many deaths he can trace to cold sponging, and in how many instances dropsy was the result of it?" I reply that some recover very well after cold sponging, and escape dropsy afterwards; at the same time we know that scarlet fever is *very fatal in large towns*, where the cold-water treatment is most used, and we are tempted to blame it. The ascertainment of any one proved medical truth has its *origin* in reasonable surmises founded on observation. I have compared the cases in this neighbourhood where the cold-water treatment has been adopted, and am satisfied that they have not been as successful as in those where it has been avoided. These I cannot name *in extenso* without allusions to myself, which would seem egotistical, and to others, which would be deemed libellous, I admit, with your correspondents, that it is sometimes pleasant; but crowds of things are pleasant which are very wrong and foolish. I admit that a very learned section of the profession and many of our experienced men are in favour of it, and that it is recommended by many able book-writers and publishers; but we must remember that a very large number of the present race of medical men are against it. Many of these are unknown to fame, but treading still the ways of a useful and noble life, thoughtful and able men, who cannot be ignored in this discussion. Nobody used it before Currie; so that, as a question of experience, we may fairly say that we have against the cold affusion the experience of thousands of years, and of men of all ages, races, and countries. Probably the rapid reduction of the surface heat by cold is better than the extreme plan formerly adopted of using heated and close rooms, curtains, and heavy coverings; but my own experience, and that of others with whom I have exchanged opinions on points of practice, have led me to believe that we have a better chance in scarlet fever where we use moderately light coverings for the patient, cool (not cold) rooms, and *let the skin alone*, except where some attention may be required for cleanliness, and that sparingly. This may be the right practice between two extremes, and I believe, if the profession were polled, it would obtain the medical *plébiscite*.

Your obedient servant,
Stratford, Essex, August, 1870. RICHARD SWEETING, M.D.

Mrs. M.—The British Home for Incurables at Clapham-rise, and the Royal Hospital for Incurables at West-hill, Putney-heath, are the two chief institutions of the kind near London.

AMERICAN DEGREES.

To the Editor of THE LANCET.

SIR,—In answer to your "Old Subscriber," I would hint that he had better find out whether or no Mr. Motley will accept of the money, and obtain for him the much-coveted M.D.

No, Sir. I have the honour of holding the M.D. degree from Harvard University, Boston, U.S.A., which I obtained after completing my study there, and undergoing just as strict an examination as anyone would have to do to obtain the qualification from any of the licensing bodies in Great Britain or Ireland, and I am just as proud of it as if I had obtained it in Edinburgh.

Harvard University is the oldest medical school in America, having been founded in 1638 in the old town of Cambridge, Massachusetts, U.S.A. In the year 1828 it had 15 academic instructors; there were 52 graduates, 254 undergraduates, 30,000 volumes in the college, and 4000 in the students' library.

If your "Old Subscriber" or anyone else wishes to obtain any further information with regard to Harvard University, they will obtain a full catalogue by writing to D. Clapp & Son, 334, Washington-street, Boston, U.S.A.

I remain, Sir, yours faithfully,
August 8th, 1870. M.D., L.F.P.S., and L.M.

MEDICAL SERVICES OF FOREIGN ARMIES.

To the Editor of THE LANCET.

SIR,—It is, I think, very desirable at the present time to obtain all practicable information in regard to the measures in force in the armies of civilised nations for the treatment and transport of sick and wounded, whether by the medical departments of those armies, or by means of philanthropic associations. I am already in possession of information of this nature in regard to several, and am very desirous to obtain similar information in regard to all. May I, therefore, be permitted to solicit the favour of any of your readers who are in a position to do so, communicating to me particulars of the army medical administration in Russia, Spain, Portugal, Belgium, Naples, Sardinia, Brazil, Mexico, &c. &c. I shall be glad to pay any necessary expenses for postage, &c., and will carefully return any manuscript with a perusal of which I may be favoured.

I am, Sir, yours truly,
C. A. GORDON,
Deputy Inspector-General of Hospitals.

Portsmouth, August 8th, 1870.

Medicus.—A zinc water-tank painted inside with red lead cannot but be a dangerous receptable for the drinking supply of a household.

Mr. Hugh Weightman is thanked for his paper, which shall receive attention.

H. W. P.—The hospital referred to is a recognised one.

EFFECTS OF LARGE DOSES OF CHLORAL IN INSOMNIA.

To the Editor of THE LANCET.

SIR,—I am one of those unfortunates who as long as I can remember have never yet had a good night's rest without the aid of drugs. No matter what fatigue I may have undergone during the day, the moment I lay my head on my pillow I begin to think. Ideas come crowding on my restless brain one after another without system or order. In fact, if the old saying, "There is no rest for the wicked," be true, I am much afraid that I am a doomed member of that confraternity. Winter and summer are just the same to me. I find my pillow too hot in either season. Many and many a time I have turned it upside down to cool my burning temples. As I remarked before, this inability to go to sleep commenced almost in infancy. I have often read up till broad daylight, and not undressed, hoping I might be able to sleep the next night; but, alas!

"That fatal bent of mind
Still to unhappy, restless thought inclined,"

prevented me from indulging in sweet repose. I know of no more pitiable condition than the one I have attempted to describe. With the exception of want of sleep, I am otherwise in good health. I have found out that alcohol taken in excess will in my case procure sleep; but in it I have no sort of inclination to indulge, and therefore it is that I am obliged to have recourse to narcotics. I have tried morphia, both bimeconate and muriate, and have experienced from its exhibition anorexia, nausea, and want of energy; cannabis indica almost provoked delirium, and bromide of potassium had no effect whatever. So you may be sure I was delighted when I saw the first account of hydrate of chloral in your journal. I procured a supply without delay, and for months had the intense delight of refreshing sleep, waking in the morning with a good appetite, and fit for any amount of work. But, alas! its effects were not lasting. In the beginning twenty grains would have the desired effect; but latterly I have often taken as much as a drachm without any effect at all. On the night of the 2nd August I took one drachm of the hydrate of chloral at about eleven o'clock, and soon after went to bed. At one, finding myself hot, restless, and weary, I determined to take another dose. I could find no matches in the room, and, as I did not like to alarm the house, I took the bottle of chloral syrup (twenty grains to one drachm), took a mouthful, and again sought sleep, but with no better result. Being teased, wearied, and stupefied, but without any inclination to sleep, I again sought the syrup, and again took another very large mouthful. I was scarcely in bed when I was fast asleep, and slept soundly from about two till half-past ten in the morning. A servant, who had occasion to enter my room about six in the morning, says that I was then snoring loudly. I was called at ten o'clock, and aroused with some difficulty. When I tried to get out of bed, I found, to my horror, that I had no control whatever over my legs from the knees down. I could not stand; my legs tottered, and I would have fallen had I not clung to the bed-post. I wish your readers to understand that I had the use of every part of my frame, except from the knees down. With the aid of a servant I dressed myself, and proceeded as well as I could to descend the stairs. In so doing I had several stumbles, and would have fallen were it not for my servant's support. I made a hearty breakfast, and went about my business as usual, the only inconvenience I felt being the unsteadiness of my gait, and a slight diminution of sensation about the lower extremities. On measuring the quantity remaining in the bottle, and knowing exactly how much it contained when I took the first dose on the night of the 2nd of August, I find that between the hours of eleven and two I swallowed about seven drachms of chloral! Had I made a similar blunder with any of the other narcotics I have mentioned, I fear I would now be in that region where

"The wicked cease from troubling,
And the weary are at rest."

Your obedient servant,
August 9th, 1870. SLEEPLESS.

MILITARY SURGEONS AT THE SEAT OF WAR.

As military surgeons are about to proceed from this country to the belligerent armies for the purpose of observing and reporting upon the sanitary, medical, and sick transport arrangements, it will be very desirable, as a correspondent suggests, that the officers selected for such appointments shall possess, among other qualifications for the duty, such an acquaintance with the French or German languages as to enable them to speak one or other of these tongues fluently.

Mr. John Ewens (Dorset) is thanked for his enclosure, and for the offer of the report, which shall be inserted as soon as possible after receipt.

Mr. J. D. Chapmell, (Paris.)—The number of deaths reported from small-pox in Paris during the week ending 30th July was, as was stated in last week's LANCET, 237. The *Bulletin* sent refers to the subsequent week, ending August 6th, when the reported deaths were 151. How far this diminution is due to the decline of the malady, or to the present disorganised condition of Parisian official affairs, we cannot, of course, tell.

Mr. J. Wilkie Burman (Exminster) is informed that his cases are in type, and will appear as soon as practicable.

COMMUNICATIONS, LETTERS, &c., have been received from — Dr. Reynolds; Dr. Henry Bennet; Mr. W. Adams; Dr. Grailly Hewitt; Dr. Weber; Dr. Tilt; Dr. Neale; Prof. Tuson; Mr. H. Weightman; Mr. E. Coathupe, Broughton; Mr. Tattersall; Dr. Mackintosh; Mr. Nicholson; Mr. Wallis; Mr. Binks; Mr. Harman; Dr. Meredith, Lampeter; Dr. Allen; Dr. Perks, Burton-on-Trent; Mr. Wilson; Dr. Hewson, Stafford; Dr. Evans, Narberth; Mr. Morris; Mr. Harding, Whittlesea; Mr. Wood; Mr. Barman, Exminster; Dr. Elliot, Stafford; Dr. Brown; Mr. Sheppard; Mr. Huxley, Jersey; Mr. Somerset, Lambourne; Mr. Rush; Mr. Fry; Mr. Macgregor; Mr. Shiel; Mr. Irvine, Carnarvon; Mr. M'Keila, Fraserburgh; Mr. Crispe; Dr. Hughes, Liverpool; Mr. Green; Mr. Williams; Dr. Taylor, Penrith; Mr. Ireton; Dr. Embleton, Newcastle; Dr. M'Leod, Bengal; Mr. Park; Dr. Macdonald; Dr. Kennedy, Newark, Delaware; Dr. Strange, Chester; Mr. W. B. Blackett; Mr. Harrison; Mr. Pugh, Brighouse; Mr. Godfrey; Dr. Foster, Leeds; Mr. Hine, Swineshead; Dr. Gooding, Blackheath; Mr. King; Mr. Mason; Mr. Davis; Dr. Hynes, Nottingham; Dr. Cassidy; Mr. S. Watson; Dr. Sweeting, Stratford; Mr. Barnish, Wigan; Mr. Ryott Newbury; Mr. Gordon, Portsmouth; Mr. Spence, Dalkeith; Mr. Beryer, Redcar; Mr. Peck; Mr. Chadwell; Mr. H. Lucin, Bury; Mr. Whitehead, Manchester; Mr. Pollard; Mr. Thompson; Dr. Long; Dr. Rose, Hampstead; Dr. Eastwood, Darlington; Mr. Propert, St. Davids; Dr. Henry; Mr. Arden, Cork; Mr. Shephard; Mr. Blaney; Mr. Bancroft; Dr. Stewart, Belfast; Mr. Richard; Mr. Taylor; Dr. Ewens, Cerne Abbas; Mr. Buck; Mr. Wilkinson; Mr. D. Evans, Brecon; Mr. S. Pieting; Mr. G. Hughes; Mr. Hanbury; Mr. Scott; Dr. Williams, Hayward's Heath; Dr. Philipson; Dr. Brietzcke, Derby; Dr. Rose, Chesterfield; M. Henri Chevreau, Paris; Mr. Dawson, Hunmanby; Mr. Brazier, Aberdeen; Dr. Fothergill, Leeds; Dr. Aveling, Rochester; Dr. Merson, Sedgefield; Mr. Waterhouse, Pontypridd; Mr. Whitmore; Mr. M'Clellan; Mr. C. Roberts, Northallerton; Dr. Macnab, Bury; Dr. Chuckerbutty, Calcutta; Dr. Harvey, Bhurtpoor; Dr. Swete, Dunmarklyn; Dr. Leslie, Birmingham; Fides; Medicus; X.; The Vice-Dean of the London Hospital; G. G.; A Constant Reader; M. M.; Query; A Well-wisher to King's College; Theta; A Medical Assistant; F. G. R.; M.D., L.F.P.S., &c.; The Medical Officer of the Privy Council; W. E. S.; Edinensis; &c. &c.

Cardiff Times, North Wales Chronicle, Birmingham Daily Post, Welshman, Croydon Chronicle, Scotsman, Derbyshire Courier, Brighton Guardian, Transactions of the New York Academy of Medicine, Bury Free Press, Indian Medical Gazette, Wigan Observer, Annali Universali di Medecine, South London Journal, Clapham Observer, Brighton Gazette, Newcastle Chronicle, Journal de Médecine de Chirurgie et de Pharmacologie, Leeds Mercury, New York Medical Gazette, and *Civil Service Gazette* have been received.

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